

10. British Ministry of Defence, "Britain Completes Destruction of Old Chemical Weapons," *Defence News*, March 27, 2007.
11. "Workers Find Poison Gas Shells at Ukraine Construction Site," *Deutsche Presse-Agentur*, June 21, 2004. Munitions, mostly dating from World War II, are recovered every month in Ukraine. Daily reports on the recovery of old munitions is provided by the Ukrainian government at www.mns.gov.ua/daily/showdailyarchive.php.
12. OPCW, "Draft Report of the OPCW on the Implementation of the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction in 2006," C-12/CRP.1, June 27, 2007, p. 8.
13. Tine Missiaen, Jean-Pierre Henriët et al., *Evaluation of the Paardenmarkt Site* (Ghent, Belgium: University of Ghent: 2001).
14. Presentations by Belgian officials at Chemical Weapons Demilitarization Conference (CWD2007), Brussels and Poelkapelle, Belgium, May 2007. [Will ask author for better reference... Could be at <http://www.dstl.gov.uk/conferences/cwd/2007/>]
15. Masanori Nishi, "Abandoned Chemical Weapons in China: Efforts for Early Destruction," Presentation at CWD2007, Brussels, May 15, 2007.
16. Conference on Disarmament, "Some Information on Discovered Chemical Weapons Abandoned in China by a Foreign State," CD/1127, February 18, 1992.
17. See CWC, "Annex on Implementation and Verification," Part IV (B), para.15 (language agreed to by virtue of the fact that both governments are state-parties to the CWC).
18. "Statement by H. E. Mr. Takeshi Nakane, Ambassador, Director-General, Disarmament, Non-Proliferation and Science Department, Ministry of Foreign Affairs at the Eleventh Session of the Conference of the States Parties [to] the OPCW," The Hague, December 5, 2006. On the type and quantity of chemical weapons in China, see Shigeyuki Hanaoka, Koji Nomura and Takeharu Wada, "Determination of Mustard and Lewisite Related Compounds in Abandoned Chemical Weapons (Yellow Shells) From Sources in China and Japan," *Journal of Chromatography A*, Vol. 1101 (2006), pp. 268-277; Science Council of Japan, "Risk Assessment of Old and Abandoned Chemical Weapons and Development of Safe Advanced Destruction Technologies," March 23, 2005.
19. "Japan: Daily Calls for Suspending Chemical Weapons Disposal Project in PRC," FBIS-CHI-20071025, October 25, 2007 (from an original article in *Tokyo Sankei Shinbun*).
20. Unnamed defense contractor, personal communication with author, February 2008.
21. H. Kurata, "Lessons Learned From the Destruction of the Chemical Weapons of the Japanese Imperial Forces," in *Chemical Weapons: Destruction and Conversion* (London: Taylor & Francis, 1980), pp. 77-93.
22. Gen'ichiro Tsukada, "National Statement on CW Issues: Measures Against the Potential Hazard of OCWs in Japan," Presentation to CWD2007, Brussels, May 15, 2007.
23. Takashi Washadi and Ryusuke Kitamura, "Destruction of Old Chemical Bombs Using DAVINCHTM at Kanda, Japan," Presentation at CWD2007, Brussels, May 14-18, 2007.
24. OPCW, "Note by the Secretariat: Proposed Verification Measures for Old Chemical Weapons Produced Between 1925 and 1946," S/166/2000, February 2000; OPCW, "Note by the Secretariat: Detailed Verification Measures for the Application of Usability Criteria for Chemical Weapons Produced Between 1925 and 1946," S/231/2000, December 2000.
25. Ron Manley, "Preparing for Disarmament: Articles II, IV and V," in *OPCW: The Creation of the Organization for the Prohibition of Chemical Weapons, A Case Study in the Birth of an Intergovernmental Organization*, ed. Ian R. Kenyon and Daniel Feakes (The Hague: T.M.C. Asser Press, 2007), pp. 150-151.
26. These costs are incurred as a result of the inspection, as opposed to other costs that are incurred regardless of whether the inspection has taken place. The parties agreed to this understanding in order to avoid having the membership as a whole effectively subsidize the cost of verification of destruction of weapons possessed by a relatively small number of the states.
27. Thomas Stock, "Old and Abandoned Chemical Weapons Under the CWC: Challenges and Reality," Paper presented at OPCW Academic Forum 2007, The Hague, September 18-19, 2007.

Letters TO THE EDITOR

"Trust Us" Is Not Enough in Pakistan

It is good to see Kenneth N. Luongo and Brigadier General (Ret.) Naeem Salik's unbridled optimism about Pakistan's ability to safeguard its nuclear arsenal ("Building Confidence in Pakistan's Nuclear Security," December 2007). But a more tempered approach would perhaps have been better. In thinking about how well Pakistan may be able to secure its nuclear weapons, materials, and experts, it is worth remembering that Pakistan has been unable to protect its constitution from military coups, has lost half its territory (East Pakistan, now Bangladesh) in 1971, and has failed to safeguard the lives of its most prominent political leaders in recent months.

The goals of Pakistan's Strategic Plans Division (SPD), with which one of the authors was associated, are indeed laudable. With U.S. tutoring and funds, the SPD says it has implemented various technical precautions such as improved perimeter security, installation of electronic locks and permissive action links that require the entry of a code before nuclear weapons can explode, and implementation of a personnel reliability program. Although these increase safety against theft or unauthorized access to weapons and material, it is better to be cautious about such security given the increasingly sophisticated and violent Islamist insurgency in Pakistan and the longer-term direction and intensity of social change.

Some claims made by those in charge of Pakistan's nukes are brash. Feroz Hassan Khan, a former SPD director, for instance told *The Wall Street Journal* in late November that "[t]he system knows how to distinguish who is a 'fundu' [fundamentalist] and who is simply pious." If it were truly so, Pakistan need not have suffered the tidal wave of suicide bombings that has crashed through its towns and cities in recent years.

The feeling of being in total control starts at the top of the army. President Pervez Musharraf, who recently resigned from the military, was asked by *Newsweek's* Fareed Zakaria in January 2008 if he thought Pakistan's nuclear weapons were safe from Islamic militants. He confidently replied, "Absolutely. It [SPD] is like an army unit. Can one rifle be taken away from an army unit? Can the bullet of a rifle be taken away from an army unit? I challenge anyone to take a bullet, a weapon, away from an army unit."

But just two weeks later, the Pakistani newspaper *Dawn* reported that Taliban militants had captured four military trucks in Darra Adamkhel on the Indus Highway. Some reportedly carried ammunition, while others were transporting 4x4 military vehicles fitted with sophisticated communications and listening technology. Another week later, the trucks were recovered, minus cargo.

There are other examples. In August 2007, the BBC reported that about 250 Frontier Constabulary soldiers surrendered to the Taliban, together with their equipment and weapons, all without firing a shot. Initially an attempt was made to deny that any soldiers had been kidnapped or had surrendered. But some weeks later, after the BBC interviewed the military officers in the Taliban's captivity, President

and then-General Musharraf criticized them for cowardice and unprofessional behavior.

Here lies the crux of the problem. In spite of the SPD's professionalism, the fact is that procedures and technical fixes are only as good as the men who operate them. This is not just an academic question. For more than 25 years, the army nurtured Islamist radicals as proxy warriors for covert operations on Pakistan's borders in Kashmir and Afghanistan. This produced extremism inside parts of the military and intelligence. Today, some parts are at war with other parts.

This chilling truth is now emerging. A score of suicide attacks in the last few weeks, some bearing a clear insider signature, have rocked an increasingly demoralized military and intelligence establishment. Fearful of more deadly attacks, military officers in Pakistan have abandoned use of uniforms except when on duty. They move in civilian cars accompanied by gunmen in plain clothes and no longer flout their rank in public.

The authors state that "there have not been any examples to date of systemic failure" in Pakistan's nuclear security. But, given that there is no oversight body, how are we to know? Even the nuclear-weapon states, the United States included, have had serious problems at some point. Pakistan has the additional problem that it cannot be guaranteed

that the custodians of nuclear weapons will always be responsible to the government.

One also does not know if radical Islamists can eventually hijack a weapon or acquire the technical expertise and the highly enriched uranium needed for a crude, in situ nuclear device. But it is quite certain that, having gone to the trouble of getting it, they will use it if they can. One should not assume that London or New York will be the preferred targets because Islamabad and Delhi may be just as good—and certainly much easier. In the twisted logic of the fanatics, there is little or no difference between apostates and those who are the tools of apostates. The suicide bombings inside mosques, and in Pakistan's public places, send exactly this message.

I would like to believe Luongo and Salik that Pakistan's nuclear weapons and materials are safe. The problem is that, like me, they really do not know. In a matter involving enormous consequences, for them to say "trust us" is not good enough.

Pervez Hoodbhoy is chairman of the Department of Physics, Quaid-e-Azam University, Islamabad, and author of *Islam and Science: Religious Orthodoxy and the Battle for Rationality* (1991).

Kenneth N. Luongo and Naeem Salik Respond:

Pervez Hoodbhoy is a longtime observer of political and nuclear developments in Pakistan, and his views are important in the debate over Pakistan's nuclear security. Our article was a factual assessment of how Pakistan's nuclear security has evolved over the past nine years, where it stands today, and how it might continue to evolve in the future. In fact, *Time* magazine characterized this piece as "the most detailed account yet of how Islamabad protects its atomic arsenal." The article speaks clearly on the threat scenarios that exist in Pakistan and acknowledges the issue of growing religious fundamentalism in both the civilian and military sectors. It emphasizes the importance of assuring and improving personnel reliability. Further, the article makes clear that Pakistan, like all nuclear nations, has ongoing and evolving security challenges and therefore must remain adaptive and open to further improvement. That is why it continues working with the United States and the International Atomic Energy Agency.

Surprisingly, however, Hoodbhoy's letter also introduces examples of challenges faced by Pakistan that are really tangential to the performance of nuclear security. His arguments about Pakistan's social fragility, the assassination of Benazir Bhutto, attacks against military units, and the 1971 secession of its eastern wing are in a category of political and social challenges faced by many nuclear nations. In the nuclear era, the United States has survived the assassination of President John F. Kennedy and the attempts on the lives of Presidents Gerald Ford and Ronald Reagan. The United States was unable to prevent the attacks on the World Trade Center and the Pentagon, and the British government failed to prevent the London Underground bombings—all acts carried out by religious extremists. These tragic events did not translate into the inability of these nations to keep their nuclear assets safe in crisis situations just as Pakistan has been able to maintain control of its nuclear assets during the recent political crisis.

Political challenges and crises will arise. The important point is to have in place the best systems possible to ensure that nuclear assets are not at risk as a result. We, like Pervez Hoodbhoy, remain concerned

with the state of nuclear safety and security in Pakistan because it is important for global security. That is why Pakistan has taken significant steps since the 1998 nuclear tests to strengthen the custodial controls of its strategic assets. This progress is important, and it needs to continue.

Kenneth N. Luongo is executive director of the Partnership for Global Security and a former senior adviser on nonproliferation policy to the secretary of energy. **Brigadier General (Ret.) Naeem Salik** is currently the South Asia Studies Visiting Scholar at the Johns Hopkins School of Advanced International Studies.



JAMES MADISON UNIVERSITY

<http://maic.jmu.edu/>

Information clearinghouse on
landmines & explosive remnants of war

Offering training and workshops

Conducting research studies

Creating publications, graphics & websites



Journal of Mine Action

Available free online at:
<http://maic.jmu.edu/journal/index/>