

CHAPTER 7

REGIONAL AND GLOBAL SECURITY

‘A BALANCE OF TERROR’

OR

‘NINE MINUTES TO MIDNIGHT’

The Bulletin of the Atomic Scientists has moved the minute hand of the ‘Doomsday Clock’ its symbol of nuclear peril, five minutes closer to midnight.

Yesterday it stood at 14 minutes to midnight. Today, it stands at nine. ¹

Introduction

7.1 The Indian and Pakistani nuclear tests sparked fears of a nuclear arms race in South Asia, of nuclear proliferation beyond South Asia, and of an increased possibility of nuclear weapons or technology falling into the hands of extremist groups. The tests heightened tensions in South Asia and raised questions about the future of the nuclear non-proliferation regime.

Implications for India and Pakistan

7.2 India’s ‘peaceful nuclear test’ in 1974 signalled India’s development of a nuclear weapon capability. It was also known over the last decade that Pakistan too had developed a nuclear weapon capability. By conducting the recent nuclear tests, both states declared their previously clandestine nuclear weapon programs. In one sense, the tests confirmed that which was already widely known.

7.3 Nevertheless, it was disturbing that India decided to conduct the tests at that time for largely domestic political reasons. By declaring its hand, even if the cards were known, it upped the stakes. The Indian Government’s nationalist Hindu rhetoric won overwhelming public support but also increased tensions not only within a multicultural India but also in relations with largely Muslim Pakistan.

7.4 Although the Pakistani Government did not immediately retaliate, it finally relented to domestic pressure to conduct its own series of tests despite international pleading and incentives to disregard Indian provocation.

1 Press Release: ‘Nine Minutes to Midnight’, *Bulletin of the Atomic Scientists*, 11 June 1998.

7.5 The fervour generated by the tests in both countries has created an atmosphere of legitimacy and support for their nuclear weapon programs, which has undoubtedly made it more difficult for either government to eliminate its program, unless the security concerns underpinning it are addressed to satisfaction.

Arms race in South Asia

7.6 The size of the Indian and Pakistani nuclear arsenals is unknown. Various estimates have been proffered, suggesting that India has the ability to assemble between 60 and 70 nuclear weapons and Pakistan about 15.²

7.7 Dr Devin Hagerty, drawing on the work of the Federation of American Scientists wrote:

At a minimum each side must assume that the other has sufficient fissile material to deploy a small number of atomic bombs on aircraft capable of delivering them: the Mirage 2000, MiG-27, MiG-29, Su-30 and Jaguar for India, and the A-5, F16 and Mirage 3 for Pakistan. It is uncertain whether India and Pakistan have deployed nuclear warheads on ballistic missiles. India's most capable operational ballistic missile is the *Prithvi-150*, which can carry a 1000-kg payload to a range of 150km Pakistan's most capable operational ballistic missile is the *Half-2*, which can carry a 500-kg payload to a range of 280 km. Both countries have test-launched ballistic missiles with longer ranges, including the Indian *Agni* (2500 km) and the Pakistan *Ghauri* (1500 km). Prudent leaders in Islamabad and New Delhi must assume that, sometime in the very near future, military forces across the border can be equipped with nuclear-armed ballistic missiles capable of reaching virtually any important target on the subcontinent.³

7.8 According to Professor Desmond Ball, Australian National University, India and Pakistan have 'fairly substantial arsenals'. He maintained that India has produced enough fissile material for at least 250 bombs and has a stockpile of between 120 and 126 weapons. He conceded that his estimate of the number of weapons is twice as high as most public estimates. In considering Pakistan, he suggested it had 30 weapons before the detonations in May.⁴ Professor Ball argued that India and Pakistan have, over recent years, steadily increased their number of nuclear weapons, with India producing about ten a year since 1990 and Pakistan increasing production from just over one a year in 1990 to about three a year at present.

2 'Tracking Nuclear Proliferation', *Carnegie Endowment for International Peace*. Internet site: <http://ceip.org/programs/npp/> (21 January 1999); see table in *The Bulletin with Newsweek*, vol. 117, 26 May 1998, p. 32 which estimates India has a capability for 74 operational warheads and Pakistan a capability for 10+. *Time* suggests India had an arsenal of about 65 warheads and Pakistan 15 to 25 warheads.

3 Dr Devin Hagerty, 'South Asia's Big Bangs', *Australian Journal of International Affairs*, vol. 53, no. 1, April 1999, referring to the 'India-Pakistan Nuclear Crisis', *FAS News*, 1998.

4 Desmond Ball and Mohan Malik, Part I: 'The Indian and Pakistani Nuclear Programmes', *The Nuclear Crisis in Asia: the Indian and Pakistani Nuclear Programmes*, Working Paper No. 325, Strategic and Defence Studies Centre, ANU, Canberra, August 1998.

7.9 A number of witnesses and strategic analysts expressed grave fears for the stability and security of the South Asian region. DFAT and the Department of Defence submitted jointly that the situation with India and Pakistan represented perhaps the most serious risk of nuclear exchange ever known.⁵ Dr William Maley submitted that there is a far greater danger of a build-up towards a nuclear exchange between India and Pakistan than between any other two declared or undeclared nuclear states.⁶ Professor Paul Dibb and Mr Peter Prince in their submission to the Committee took a similar position.⁷

7.10 Professor Desmond Ball spelt out his concerns about regional security since the nuclear tests. He stated:

They have raised the prospect of uncontrolled nuclear proliferation. They have increased the potential for crisis instability on the subcontinent, raising fears of nuclear pre-emption and nuclear war. They have raised the likelihood of a nuclear arms race between India and China. They have destabilised the security of the Asia-Pacific region as a whole.⁸

7.11 Dr Richard W. Hu, University of Hong Kong, shared Professor Ball's apprehension for the South Asia region. He believed that there is a strong likelihood that the arms race would accelerate in South Asia.⁹

7.12 The nuclear tests have increased the level of uncertainty and tension in South Asia and apprehension within the region and globally. As a very minimum effect, their detonation in an atmosphere of nationalistic jingoism could have had no other result. Other than heightened tension, the question is whether there is other evidence of an arms race?

7.13 As already stated, the number of nuclear devices each country has is a matter of conjecture. There are no authoritative public data available. It is also unknown whether nuclear devices have been weaponised or deployed. Both sides have aircraft that can carry nuclear bombs and missiles with the payload and range suitable for nuclear warheads. Missile tests in recent years, including early 1999, have served both to develop a strategic capability and maintain tension between the two sides. However, as Dr Abdul Qadeer Khan - acknowledged father of Pakistan's bomb - has pointed out:

5 Submission no. 33, vol. 3, p. 10.

6 Submission no. 36, vol. 3, p. 156.

7 Submission no. 42, vol. 3, p. 190.

8 Desmond Ball and Mohan Malik, Part I: 'The Indian and Pakistani Nuclear Programmes', *The Nuclear Crisis in Asia: the Indian and Pakistani Nuclear Programmes*, *ibid.*

9 Dr Hu is Associate Professor of International Relations, Department of Politics and Public Administration, University of Hong Kong. See Richard W. Hu, 'Beyond the N-Test: Managing the Nuclear Arms Race in South Asia', *Disarmament Diplomacy*, no. 27, June 1998. Internet site: <http://www.gn.apc.org/acronym/27manag.htm> (21 September 1998)

The numbers are less important than their effectiveness and sophistication. If there is a war, you need only a few. Deterrence is the main advantage. Now they know we also have nuclear weapons, they will think ten times before invading us.¹⁰

7.14 Undoubtedly, India and Pakistan are refining their nuclear capabilities using the data gained from their tests. Similarly, both countries are developing missiles capable of being armed with nuclear warheads. To what extent the tit-for-tat missile tests signify major developments in missile capability or whether they are mainly public relations exercises for domestic consumption is open to debate. Nevertheless, scientists derive data from such tests to upgrade missile capability irrespective of the main reason for conducting them.

7.15 There is a significant difference in the size of the Indian nuclear weapon and missile arsenal, both in terms of number and sophistication, compared with that of China. India has never indicated that it is trying to achieve nuclear parity with China. By having a nuclear weapon capability, it considers that it has a deterrent to Chinese nuclear blackmail or invasion. Similarly, Pakistan seems to have adopted a deterrent posture with its nuclear weapon capability and has not sought to achieve nuclear parity with India. Although both India and Pakistan are developing their nuclear weapon and missile capabilities, there is no evidence of an 'arms race' between the two.

7.16 Deterrence is an old idea and an even older practice in statecraft.¹¹ Those who adhere to the theory of nuclear deterrence believe that nuclear weapon capability inhibits any risk-taking that could possibly escalate into a nuclear exchange. They believe that only nuclear weapons can deter the use of nuclear weapons: that nuclear weapons are for deterrence and not for use.¹² Deterrence works when adversaries perceive that they both have a credible attack capability which, because of the fear of serious reprisal, will prevent either from taking any action likely to provoke such a reprisal.¹³ That capability also depends on a state having a second strike capacity, which means that after having sustained a nuclear attack, it still has enough nuclear capability to inflict an unacceptable level of damage on its enemy.

7.17 Dr Brahma Chellaney wrote recently that India has not yet developed a nuclear doctrine and has yet to integrate its nuclear capability into its force structure:

10 Interview with A.Q. Khan, *Frontline*, vol. 15, no. 12, 6–19 June 1998.

11 Colin S. Gray, *Comparative Strategy*, vol. 2, Taylor & Francis Hemisphere Publishing Corporation, Washington DC, pp. 247–67.

12 Ibid. See also Devin Hagerty, 'Nuclear Deterrence in South Asia: the 1990 Indo-Pakistani Crisis', *International Security*, vol. 20, no. 2, Winter 1995; Tim Healy and Arjuna Ranawana, 'Upping the Ante: Pakistan's Nuclear Tests: Think the Unthinkable', *Asiaweek*, 12 June 1998; Avery Goldstein, 'Scared Senseless? The South Asian Nuclear Tests' at Internet site: <http://www.indianembassy.org/pic/usmedia/goldstein.htm>.

13 Barry Nalebuff, 'Minimal Nuclear Deterrence', *Journal of Conflict Resolution*, vol. 32, no. 3, September, 1988, pp. 412–13.

Many months after conducting multiple nuclear tests, India has still to bring the military into the nuclear picture. This despite the fact that it has declared itself a NWS. The paradox of a country proclaiming it has a nuclear deterrent without the necessary military underpinnings has created an inherently dangerous situation, in which a potential adversary could be tempted to try and call India's bluff. It also highlights the marginalisation of one of the world's largest militaries.

Sooner rather than later, however, India will have to bring its military into nuclear planning. Without a military's involvement, it will not be possible for India to devise and put into operation a nuclear deterrent, which would involve targeting and deployment practices.

...

The failure to involve the military in nuclear planning has resulted in India still being vague about its nuclear doctrine. The only elements of the doctrine made public are that India will practice, in French-style terminology, 'credible minimum deterrence', and not be the first to use nuclear weapons. While those objectives are commendable, they only seek to make a virtue out of necessity: India does not have the plutonium or financial resources to exercise more than the barest of minimum deterrence, and is far from having the capacity to carry out a disabling first strike against an opponent. India's minimum deterrence is likely to look in the initial years as no more than counter-city deterrence. While India is going to have a diversified nuclear dyad made up of ballistic missiles and bomber aircraft, it is still distant from an invulnerable second-strike capability with submarine-launched missiles.

Similarly, the only discernible aspect of India's command and control system is that it will be firmly controlled by civilians, with the Prime Minister as the ultimate decision-maker at the head of a yet-to-be established Strategic Nuclear Command. An effective command-and-control system, of course, can only emerge over a period of time. After all, it took the traditional nuclear powers many years (in the case of the US, more than 15 years) to develop a command-and-control system that provided a degree of self-assurance.¹⁴

7.18 While Dr Chellaney alluded to the development of a second strike capability, in an opening statement on behalf of DFAT, Ms Stokes said that 'Halting further weaponisation will be difficult, we assess, given that India and Pakistan are likely to try to develop credible second-strike capabilities'.¹⁵ In a subsequent written statement, in relation to this assessment, DFAT advised that:

14 Dr Brahma Chellaney, *India's Nuclear Planning*, Australian Journal of International Affairs, vol. 53, no. 1, April 1999, pp. 65-6.

15 *Committee Hansard*, 4 December 1998, p. 375.

The statement is a commonplace analysis of the security and strategic situation in South Asia now that India and Pakistan have demonstrated nuclear weapons capability. The Indian government has declared that a key element of its nuclear doctrine is 'no first use' of nuclear weapons, which presupposes a second strike capability, that is, the capability to absorb an initial nuclear attack and still respond in kind.

The cornerstone of any nuclear deterrence policy is the ability to deter deliberate nuclear attack by maintaining an ability to inflict unacceptable damage on the aggressor - even after absorbing a surprise nuclear attack. A *second-strike capability*, therefore, is the capability to absorb a *first-strike* and survive with sufficient power to inflict unacceptable damage on the aggressor - to the point that a disarming first-strike becomes unattainable.¹⁶

7.19 Although the timing of the Indian nuclear tests was determined by domestic political circumstances, Indian nuclear scientists had been waiting a long time for government approval to conduct the tests. The data derived from the tests would no doubt have been used in the further development of Indian nuclear technology. It appears that India has also been working towards nuclear warheads for Prithvi and Agni missiles and that development will continue to take place. The Committee also presumes that Pakistan is continuing the development of its nuclear capability along similar lines.

7.20 Several witnesses asserted that India and Pakistan lacked command, control and intelligence systems and fail-safe mechanisms for their nuclear weapons that were comparable in sophistication to counterparts among the nuclear weapon states.¹⁷ DFAT pointed to the increased risk of miscalculation particularly given the lack of established nuclear weapons doctrines and command and control systems, the paucity of direct communication and the short flight times.¹⁸

7.21 Dr Devin Hagerty wrote that:

Over time, Washington and Moscow developed sophisticated command-and-control arrangements that buffered their gigantic nuclear infrastructures against the accidental or unauthorised use of nuclear weapons. In contrast, very little is known about Indian and Pakistani command-and-control systems, which are assumed to be rudimentary. If missile flight times of 20–30 minutes provoked enormous anxiety in the US-Soviet case, flight times of 5–10 minutes on the subcontinent are doubly worrisome. In combination, these factors cause many analysts to fear that so-called 'hair-trigger' pressures may eventuate in an Indo - Pakistani nuclear war, whether

16 DFAT to the Committee, letter dated 9 February 1999.

17 Professor Paul Dibb and Mr Peter Prince, Submission no. 42; vol. 3, pp. 189-90; Dr Hanson, *Committee Hansard*, 20 July 1998, p. 68; Dr William Maley, *Committee Hansard*, 21 July 1998, p. 156; DFAT, *Committee Hansard*, 21 July 1998, p. 96; see also statement by Mr Harun Rashid, *Committee Hansard*, 21 July 1998, p. 143.

18 Submission no. 33 vol. 3, p. 10.

intended or not. As one influential US report sums up this conventional wisdom:

...the Indian and Pakistani nuclear tests have made South Asia and the world a more dangerous place. The presence of nuclear forces in the arsenals of two adjacent and often quarrelling countries increases the likelihood that nuclear weapons could be used in a conflict - and dramatically raises the human and financial costs of any armed confrontation should deterrence fail... No one should be sanguine about the prospects for regional stability. (Brookings Institution/Council on Foreign Relations 1998:2-3).

Few strategic analysts would disagree with this characterisation of the South Asian nuclear arms competition.¹⁹

7.22 There is no evidence to suggest that the command and control systems of India and Pakistan have reached beyond a rudimentary stage of development, if in fact they have got that far. Unfortunately, there is no independent authoritative assessment available. It should not be forgotten, however, that both sides have had nuclear weapons for perhaps ten years and, despite high tensions between them at times, which almost resulted in serious armed conflict, they have weathered these problems. Nevertheless, if nuclear weapons are deployed and targeted, the lack of sophisticated command and control systems could, in a crisis, lead to unfortunate consequences.

7.23 Professor Saikal thought that the present situation had the potential to lead India and Pakistan towards some sort of rapprochement and was likely to stabilise rather than destabilise their relationship. He accepted that a nuclear clash is always a possibility but the fact that both countries have a nuclear capability 'may serve as a restraining measure from allowing their conventional clashes to develop into a full-scale military confrontation and therefore a possible nuclear clash'.²⁰

7.24 Dr Hu argued:

The India-Pakistan nuclear arms race will create a very fragile 'balance of terror' in South Asia. Some people argue that mutual fear of a nuclear exchange will make conflict unlikely, and thus that possessing the bomb can prevent crises from escalating into war. But, the 'balance of terror' between India and Pakistan is not comparable to the mutual deterrence in effect between the superpowers during the Cold War. Unlike the Cold War situation, neither antagonists has a survivable or credible second-strike capability, nor assured destructive power against all high-value targets. More importantly, neither side has experience of mutual deterrence. It is true that the explicit nuclear capability now demonstrated will make the leaders of India and Pakistan more prudent in their calculations over any

19 Dr Devin Hagerty, 'South Asia's Big Bangs', *Australian Journal of International Affairs*, vol. 53, no. 1, April 1999, p. 25.

20 *Committee Hansard*, 21 July 1998, p. 150.

potential conflict. But their nuclear stand-off is not likely to reproduce the kind of crisis stability that existed over an extended period between the major nuclear powers.²¹

7.25 Dr Yasmeen argued that the Pakistani tests have given stability to the region in the short term; that in conducting its own tests Pakistan has restored the defence/offence strategic balance between the two countries which has eased the immediate tension. She argued that had Pakistan not followed suit, a sense of crisis would have prevailed in the country.

7.26 In the long term, however, she pointed out that the tests have added a major element of regional and international instability. She thought that if both adversaries have nuclear weapons and if there is a possibility of weaponisation then ‘something could happen’. Dr Yasmeen could see that having broken the barrier of undeclared nuclear weapons by becoming declared nuclear weapons there existed the possibility of their going a step further.²² She stated:

Given India and Pakistan’s geographical proximity, short aircraft or missile flight times (2–5 minutes) leave little time to analyse and verify false alarms from the other side in a crisis situation. Also given the history of animosity between them, it is possible that in a tense crisis situation signals from the other side can be misinterpreted and lead to a decision to start conflict. Even if the crises do not turn into conflicts, the use of nuclear weapons as a part of the crisis management language would be destabilising.²³

7.27 Agreeing with Dr Yasmeen, Dr Hanson accepted that the Indian and Pakistani nuclear tests would stabilise rather than destabilise relations between the two countries, and that, indeed, in having revealed their nuclear capability India and Pakistan have provided a degree of deterrence. Nonetheless, she asserted:

This does not lessen the fact, however, that the volatile internal politics of both countries render any such stability highly fragile. Nuclear elimination analysts argue that the risks of retaining nuclear arsenals, even in relatively stable regions, far outweigh any possible benefit imputed to their ability to deter acts of aggression. But in any case, the wider strategic issues, especially the fact that these tests may prompt other states to violate the non-proliferation norm, point to them being a significant setback for international security.²⁴

7.28 Professor Dibb and Mr Prince also pointed out that the risk is made all the greater because the leaders of India and Pakistan seem to have abandoned a cautious

21 Richard W, Hu, ‘Beyond the N-Tests: Managing the Nuclear Arms Race in South Asia’, *Disarmament Diplomacy*, *ibid.*

22 *Committee Hansard*, 22 July 1998, p. 184.

23 Submission no. 30, vol. 2, p. 140. See also *Committee Hansard*, 22 July 1998, pp. 174–75.

24 Submission, no. 20, vol. 1, p. 202; see also *Committee Hansard*, 20 July 1998, p. 66.

approach, and now wield their nuclear weapons capability as ‘a proclamation of national power’. They concluded:

The combination of aggressive ‘nuclear nationalism’ and newly developed missile attack systems makes the situation on the Indian sub-continent extremely volatile.²⁵

7.29 The weight of evidence is the existence of a qualified stability in South Asia as a result of the tests but not without some risks. Some evidence suggests a level of deterrence exists, even though it is not necessarily deterrence in traditional terms; that is, that each side has a second strike capability. The lack of reliable information about weaponisation of Indian and Pakistani nuclear capabilities and their locations might, however, signal the need for caution to a potential aggressor.

7.30 The general state of relations between India and Pakistan gives cause for concern. Despite a well-publicised meeting between Prime Minister Vajpayee and President Shariff in early 1999, relations between the two countries have been poor for a long time. Continuing armed conflict on the Siachen Glacier, tit-for-tat missile launches, an escalation of fighting in Kashmir in late May/June 1999 and a caretaker government in India do not herald an early rapprochement between the two sides. As the timing of the nuclear tests was largely determined by the domestic political situation at the time, one cannot rule out the use of Hindu nationalism and anti-Muslim rhetoric during the long election period for domestic political purposes. If this happened, it would only serve to heighten tension once again in South Asia and the wider region.

Extremist groups

7.31 Concerns were expressed during the inquiry about the possible transfer of nuclear weapons and technology into the hands of third parties, especially extremist groups.

7.32 Professor Copland thought there was a possibility, albeit a slim one, of Indian or Pakistani nuclear weapons or related technology passing into the hands of ‘local extremist groups - Islamic fundamentalists in Karachi with links to Libya and the Palestine Hezbollah - and ethnic insurgents such as the Liberation Tigers of Tamil Eelam (LTTE), who are said to have Pakistani connections’.²⁶

7.33 Dr Malik was less confident about India’s and Pakistan’s ability to contain the spread or leakage of nuclear weapons or technology. He told the Committee that the possibility of nuclear weapons falling into the hands of extremists, for example the Kashmiri separatists or religious fanatics, could not be ruled out. He added: ‘Anybody

25 Submission no. 42, vol. 3, p. 90.

26 Submission no. 4, vol. 1, p. 19.

who is familiar with the region knows how lax security controls are in that part of the world'.²⁷

7.34 Professor Dibb accepted that the risk of nuclear technology coming into the hands of extremist groups had been present since nuclear programs were first developed on the subcontinent. Nonetheless, he surmised that were:

“Pakistan to share its nuclear weapons know-how with its Islamic colleagues in the Middle East - a prospect arguably more likely now - the risk of terrorist access would greatly increase. This is not least the case because of the direct links between some Middle East terrorist organisations and governments in the region.”²⁸

7.35 It should be noted that both India and Pakistan have held up their record as responsible international citizens to dismiss claims about the possibility of their nuclear weapons or technology passing on to third parties. On 11 May 1998, the Indian Government announced in a press statement that it would like to reaffirm categorically that it would ‘continue to exercise the most stringent control on the export of sensitive technologies, equipment and commodities especially those related to weapons of mass destruction’. It emphasised that its ‘track record has been impeccable in this regard.’²⁹ The Pakistani Prime Minister clearly acknowledged that his country had an obligation to handle its nuclear weapons system responsibly and pledged that it would ‘not transfer sensitive technologies to other states or entities.’³⁰

7.36 Of the two countries, witnesses held greater concern over Pakistan’s ability to manage and maintain control over its nuclear weapons system. Dr Yasmeen pointed out that anyone arguing that nuclear weapons could fall into the hands of fundamentalist groups is probably not aware of the ‘secrecy and control’ that has marked the development of Pakistan’s nuclear weapons program. She maintained that Pakistan’s nuclear program had moved ahead and, despite the last 10 or 12 years of extreme instability in that country, any idea that nuclear weapons or technology would come into the hands of other groups has not happened.

7.37 The Committee does not believe that the risk of extremist groups obtaining Indian or Pakistani nuclear devices or technology is significant or is higher now than it was before the tests. Pakistan’s record in maintaining the security of its nuclear programs is unblemished. In fact, the security of Russia’s nuclear weapons – fissile material and nuclear technology – is of much greater concern than nuclear security in South Asia. Nevertheless, there is always a risk of a security breach with any nuclear program. The more programs in existence, the higher is the risk of theft from them.

27 *Committee Hansard*, 20 July 1998, p. 55.

28 Submission no. 42, vol. 3, p. 192.

29 Press Statement, Shiv S. Mukherjee, Minister (Press, Information & Culture), Embassy of India, 11 May 1998.

30 Text of Prime Minister Muhammad Nawaz Sharif’s Statement at a Press Conference on Pakistan Nuclear Tests, Islamabad, 29 May 1998, *Government of Pakistan Homepage* (17 August 1998)

7.38 Dr Yasmeen admitted that she would find it difficult to imagine Pakistan allowing its nuclear technology to come into the hands of third parties. Even so, she was concerned about the parlous state of the Pakistani economy and the damage that the imposition of sanctions could have on it. She was concerned that the economy could deteriorate to such an extent that the present government could be overthrown and replaced by an unstable government. She told the Committee, 'that is being really talked about in Pakistan; the possibility of an Islamic fundamentalist government'.³¹

7.39 Professor McPherson was similarly concerned about Pakistan's weak economic situation and its implications for security. He described Pakistan's economy as being 'in a state of near collapse, internal law and order remains a chronic problem and democratic institutions are far more fragile than in India.'³² He suggested that an immediate danger could be an act of military desperation by Pakistan 'cornered by foreign censure and surrounded by neighbours perceived to be hostile'.³³ Put simply, he explained:

In a breakdown of law and order and a breakdown of the state there is a possibility for maverick elements to take control of these systems and that worries me.³⁴

7.40 DFAT, Dr Saikal and Dr Maley all drew the Committee's attention to Pakistan's difficult economic circumstances and the dangers this held for the stability of the political system and, ultimately, the control of nuclear weapons. Nevertheless, in the twelve months since the tests, there is nothing to suggest a deterioration in the situation in Pakistan. The Pakistani economy has not collapsed as the more pessimistic commentators thought might happen. Even so, the economy is by no means robust and there is still cause for concern although an economic crisis does not appear to be imminent.

Islamic bomb

7.41 Some commentators have seen Pakistan's nuclear weapon development as the rise of an 'Islamic bomb'. In other words, it was suggested that Pakistan, as the first Muslim nation to acquire nuclear weapons, would help other Muslim nations to develop such weapons. Several Muslim nations, including Iraq and Iran, are known to have aspirations of becoming a possessor of nuclear weapons. The concept of an 'Islamic bomb' was, however, given no credence in the inquiry. Dr Yasmeen told the Committee that 'the Pakistan government is very clear about not sharing its nuclear technology with anyone, Muslim or non-Muslim, to identify it as an Islamic bomb is

31 *Committee Hansard*, 22 July 1998.

32 Submission no. 5, vol. 1, p. 27.

33 *ibid*

34 *Committee Hansard*, 22 July 1998, p. 221.

really a misnomer'.³⁵ As mentioned above, the Pakistan Government has stated unequivocally that it will not transfer nuclear technologies to other states.

Triggers

7.42 Professor Robin Jeffrey suggested that the risks are less from 'formal' war between India and Pakistan than from rogue elements in both militaries, from theft by terrorists, from 'leakage' to other countries, and from accident and maintenance disasters.³⁶

7.43 Accepting that there is the possibility of a nuclear exchange between the two countries, a number of witnesses pointed to situations likely to trigger a serious confrontation. Kashmir in particular, has been cited as a possible flash point. India and Pakistan have fought two wars - 1948 and 1965 - over Kashmiri territory and it remains a 'major thorn in their bilateral relations'. Kashmir is one of the most militarised regions in the world. It has troops positioned on either side of a ceasefire line. They engage in regular skirmishes which have the potential to flare into serious exchanges between the Indian and Pakistani forces.³⁷

7.44 Dr William Maley asserted that it was the combination of nuclear capability with points of friction that could lead to unintended escalation in a conventional conflict. In referring to India and Pakistan, he noted:

What sets this pairing of nuclear states apart from, for example, the pairing of the United States and the Soviet Union is that they did not have territorial disputes which brought them into immediate eyeball to eyeball confrontation, whereas in the case of India and Pakistan there are major territorial disputes in Kashmir and in respect of the Siachen Glacier. Those are literally situations in which Indian and Pakistani conventional forces are staring right down each other's barrels. That creates the danger of some small incident which can blow up to something slightly bigger, to something slightly bigger again and end up with a consequence which nobody particularly intended or desired in which the sense of state honour leads elites away from a very hard-headed, rational appreciation of the dangers in which they are placed into behaviour which, looked at from the outside, would be massively self-destructive.³⁸

7.45 He pointed out that this sense of danger is heightened by the development of missile technology:

It creates a situation of extreme risk of pre-emption because there is so little opportunity to interdict a nuclear weapon once it is launched in

35 *ibid.*, p. 185.

36 Submission no. 32, vol. 2, p. 152.

37 See evidence presented before the Committee by Raspal Khosa, *Committee Hansard*, 21 July 1998, p. 168.

38 *Committee Hansard*, 21 July 1998, p. 160.

circumstances of short warning times that if a crisis develops the only way in which it may seem possible to save one's country is to strike pre-emptively against the other side before they can strike against you...³⁹

Nuclear weapons and national greatness

7.46 Mr Alan Oxley approached this problem of nuclear weapons and a nation's perception of its security interests from a different angle. He asserted that 'basic economic strength is now the instrument through which nations have a role and exert some influence'.⁴⁰ Based on studies of historical adversaries France and Germany; and Argentina and Brazil, he concluded:

...when traditional rivals strive to achieve security by achieving military supremacy, they do not achieve security and they deny opportunities for increasing prosperity because they can not secure the benefits of economic integration.

Where they have eschewed military competition and sought economic integration, they have increased economic prosperity and have secured greater military security.⁴¹

In applying this theory to India, he maintained:

India has sought to achieve its position in the world by achieving a certain military position and strength and has neglected its economic strength. That is probably why it exerts a far smaller role in global affairs than it would aspire to.⁴²

7.47 In brief, he stated that military competition between India and Pakistan, clearly demonstrated in their race for nuclear superiority, 'pre-empt the conditions for economic integration, for economic prosperity, and for mutual security'.⁴³

7.48 The Pakistan Government clearly appreciated the advantages that would come to its people by turning away from military build-up and toward social and economic development.

Pakistan recognizes that economic deprivation and increasing poverty are among the basic causes of global instability. In such circumstances, the arms race is a cruel contradiction as it consumes precious resources, diverting them from the noble goal of uplifting humanity from hunger and disease. Pakistan, therefore, recognizes the complementary relationship between disarmament and development and fully endorses the view that precious

39 *Committee Hansard*, 21 July 1998, p. 162.

40 *Committee Hansard*, 7 August 1998, p. 350.

41 Submission no. 45, p. 209.

42 *Committee Hansard*, 7 August 1998, p. 350.

43 Submission no. 45, p. 211.

material and human resources should not be squandered on arms build-up. Promotion of the regional peace and security through a military balance at the lowest level of armaments is an objective which would effectively promote an environment where more resources could be allocated to economic development.⁴⁴

7.49 Professor Hu suggested that since India and Pakistan have detonated their nuclear bombs, the international community should accept this development as a *fait accompli* and now focus on 'how to manage and prevent a potentially catastrophic nuclear arms race in South Asia'.⁴⁵

Security concerns in the Indian Ocean

7.50 Relating the South Asian nuclear tests to Australia's specific interests, DFAT argued *inter alia* that they have the potential to affect Australian security concerns adversely because they: create the potential for nuclear confrontation in a region contiguous to Australia's area of immediate strategic concern; and could lead to a more general degradation of regional and global security environments.⁴⁶

7.51 Professor Paul Dibb and Mr Peter Prince held more immediate concerns about possible developments in the Indian Ocean. They offered the following assessment:

With its current leadership, India clearly believes a nuclear weapons capability gives it greater international standing, influence and power. Thus Australia will face a more assertive India in the Indian Ocean. While the two countries do not have extensive overlapping interests in the region, they have clashed in the recent past - for example over former Foreign Minister Gareth Evans' attempts to create a multilateral body of Indian Ocean states.

Should India develop - with Russian help - a sea-based nuclear weapons capability, deployable across the Indian Ocean, this would be of major concern to Australia, relevant in this context is Russia's eagerness to swap key military technologies for foreign currency, which provides India with a ready source of nuclear and related technology, including systems for naval deployment. This points to a greater requirement for Australian surveillance of the Indian Ocean area, in coordination with its friends and allies.⁴⁷

7.52 The Committee believes that, although remote, the possibility of rising tensions in the Indian Ocean should not be discounted. The importance of surveillance and intelligence gathering in this region underscores the need for Australia to re-establish defence links with India and Pakistan, especially the reappointment of Defence Advisers in India and Pakistan, and to strengthen political ties with Indian Ocean rim and South Asian countries.

44 *Government of Pakistan Homepage* Internet site: <http://www.pak.gov.pk/govt/fp13.htm>

45 'Beyond the Nuclear Tests', *Government of Pakistan Homepage*.

46 *Committee Hansard*, 21 July 1998, p. 86.

47 Submission no. 42, vol. 3, p. 191.

Implications for India and China

7.53 Dr Malik told the Committee:

In the south Asian context, the nuclear proliferation chain started with China when China conducted its first bomb test in 1964. India's nuclear weapons program was a response to China's nuclear weapons program. So, in the beginning when India refused to sign the 1967 NPT, Pakistan was not a consideration. In 1974, when India tested its first nuclear bomb, Pakistan was not a consideration. In fact, if Pakistan were the only security concern, India would have liked to see south Asia remain a nuclear-free zone because India's superiority in conventional arms provides India with a huge leverage vis-a-vis Pakistan.⁴⁸

As India continues to have a conventional arms superiority over Pakistan, Pakistan's only real threat to India's security is its nuclear weapon capability.

7.54 According to Mr Oxley:

As China starts to acquire significant global nuclear capability, we do not need people to stimulate it to acquire a bigger and greater capacity. We need China to consider that it can build its security by economic and trade relationships. It is not in our interests that China emerge as a nuclear superpower in the region. India's actions have a significant impact on encouraging China to go down that route.⁴⁹

China was aware of India's undeclared nuclear capability and appears not to regard India's recent tests as increasing the security threat to itself. There is no evidence to suggest that China intends to upgrade its nuclear capability on the basis of developments in South Asia. DFAT/Defence submitted that:

China has concerns at the outbreak of a nuclear arms race between India and Pakistan, and the addition of more destabilising factors to an already turbulent situation to its south. Given India's desire to rival China and the strength of China's traditional ties with Pakistan, China is a critical factor in assisting in the reduction of tensions in South Asia. It is notable that China's reaction to the outbreak of nuclear testing in South Asia has been restrained, but also firm in pressing support for the international nuclear non-proliferation regime.⁵⁰

7.55 During the second hearing with DFAT on 4 December 1998, the Ms Stokes, in her opening statement, said: 'Another significant concern is that India may seek to close what it perceives as a strategic vulnerability vis-a-vis China; this may lead India

48 *Committee Hansard*, 20 July 1998, p. 46.

49 *Committee Hansard*, 7 August 1998, p. 357.

50 DFAT/Defence, Submission no. 33, vol.3, p. 11.

to divert additional resources into its nuclear program'. This comment was amplified in a subsequent written statement by DFAT.

7.56 Until the election of the BJP led coalition, relations between India and China had been improving over the previous decade. Nevertheless, throughout this period, China had allegedly been supplying missile and nuclear technology to Pakistan. It is inconceivable that China would not have known that such transfers would increase instability in South Asia. However, Dr Malik went as far as asserting that this was a deliberate policy to distract India from competing against China in economic development and in becoming an influential player in Asia. It is also understandable, from an Indian perspective, that China's military assistance to Burma's military government and its consequential access to the Indian Ocean would be seen by India as a threatening move by the Chinese Government. Dr Malik cited the two moves as an attempt by China to encircle India.⁵¹

7.57 The Committee agrees with the DFAT/Defence assessment cited above that 'China is a critical factor in assisting in the reduction of tensions in South Asia'. Since 1962, India has regarded China as its main security threat and rival in Asia and many of China's actions over the last decade have reinforced this view. It was this threat which prompted India to initiate and continue to develop a nuclear weapon capability.

7.58 It is also understandable that China would be 'firm in pressing support for the international nuclear non-proliferation regime'. It is a legal nuclear weapon state under the NPT and it is obviously in its national interest for India to dismantle its nuclear weapon program and join the NPT as a non-nuclear weapon state.

7.59 At the hearing on 4 December 1998, Ms Stokes, in her opening statement, said that 'Another significant concern is that India may seek to close what it perceives as a strategic vulnerability vis-a-vis China; this may lead China to divert additional resources into its nuclear program'.⁵² In a subsequent letter, DFAT amplified this statement:

India's sense of strategic vulnerability vis-a-vis China dates from their 1962 war, and acquired a nuclear dimension following China's detonation of a nuclear device in 1964. On 4 May 1998, one week prior to India's first series of nuclear tests, Defence Minister George Fernandes said in a televised interview that China was India's "potential threat number one". Following India's nuclear tests, Prime Vajpayee cited the security threat posed by China as the main reason for India conducting the tests. *The Times of India* on 12 May 1998 quoted an unnamed Indian military source as follows: "Given that universal nuclear disarmament is utopian, and that China is merrily proliferating, there was no option but to take steps to perfect our deterrent." The statement by Smt. Vasundhara Raje, Indian

51 See *Committee Hansard*, 20 July 1998, p.48.

52 *Committee Hansard*, 4 December 1998, p. 375.

Minister of State for External Affairs in the general debate at the Ministerial Meeting of the Non-Aligned Coordinating Bureau in Cartagena de Indias on 19 May 1998 contains the following statement: "... in our region the strategic situation became steadily intolerable. We have found ourselves surrounded by nuclear weapons, either overtly or covertly deployed. Our government had to take steps to ensure that, if the security of our people ... was threatened, we would have the same capability to defend them as those which the nuclear weapons states consider essential for themselves."

An intent by India to develop a strategic capability vis-a-vis China is further indicated by its active development of the *extended range AGNI (ER-AGNI)* ballistic missile with a planned range of 2,500 kilometres. India does not require such a range to strike Pakistan nor would it afford India a significant second-strike capability against Pakistan. The Indian Government has announced its intention to test the *ER-AGNI* in 1999. Pakistan's missile development program is focused solely on countering a perceived threat from India.⁵³

7.60 Although there is some basis for arguing that India will further develop its nuclear weapon capability, there is no evidence to suggest it is trying to match China's nuclear capability.

7.61 China, for its part, began its nuclear weapon program because of perceived threats from the USSR and the United States. There is no evidence available to suggest that China's nuclear weapon program was intended for use against India or that China has any designs on Indian territory. Although a part of the border between the two countries is still in dispute, neither side has shown any interest in trying to wrest away the disputed land from the other since the border war of 1962, unlike the armed conflict which has bedevilled the Line of Control between India and Pakistan over the last decade.

7.62 China sees India as a rival in Asia but not as a security concern in the same way as it sees the United States and Russia, or even Taiwan and Japan. As relations with the United States waxes and wanes, so does China's concerns of its own security. In the same way as India perceives China's so-called encirclement of India, China has often accused the United States of trying to encircle China.

It is probably fair to say that 1996 was the lowest point in Sino-U.S. relations in twenty-five years, and between China and Australia as a spin-off. the Taiwan Strait crisis and the unqualified Australian support for U.S. actions, the reinterpretation of the U.S.-Japan security alliance, the reinvigoration of the U.S.-Australian security alliance, and the Agreement on Maintaining Security between Australia and Indonesia cumulatively sapped the strength of the Australia-China relationship.⁵⁴

53 DFAT, letter dated 9 February 1999 to the Committee.

54 Ramesh Thakur, 'Australia's Regional Engagement', *Contemporary Southeast Asia*, vol. 20, no. 1, April 1998.

7.63 India's nuclear tests probably contributed to a rapprochement between China and the United States in 1998, albeit of short duration, as other issues achieved prominence which removed the gloss once again from the relationship.

Proliferation beyond South Asia

7.64 Some witnesses believed that the tests could provoke nuclear proliferation beyond South Asia and that other nuclear threshold nations might seek to join the nuclear club.⁵⁵ They suggested that the nuclear tests could spur countries, such as Iran, Libya, North Korea and some Latin America countries to develop a nuclear capability.⁵⁶

7.65 Professor Saikal recognised that the nuclear tests could possibly entice a number of other regional forces, notably Iran, to seek their own nuclear weapon capability. The Pakistani tests probably confirmed Iran's fear that it is surrounded by nuclear states - Israel to the west and Pakistan to the east.⁵⁷ Iran's security concerns also include Iraq. It would also have wider strategic interests in developing a nuclear weapon capability.

7.66 In keeping with the views of other witnesses, Dr Hanson considered 'we may well see other states - Iran, Iraq, North Korea, Syria - either initiate their own programs or reactivate their agendas to acquire a similar capability'.⁵⁸

7.67 DFAT also recognised the possibility that India's and Pakistan's demonstrated nuclear weapons capability could arouse more interest in weapons development in Iraq, Libya, Syria and Iran and fuel their nuclear aspirations. It submitted:

A worst-case scenario could see a Middle East state using India's and Pakistan's claim to be nuclear weapon states as the public justification for exercising its right under Article X of the NPT to withdraw from the Treaty.⁵⁹

7.68 Professor Dibb and Peter Prince added their voices to the concern about Indian and Pakistani preparedness to proclaim their nuclear capability and its influence on other states. They maintained:

Israel in particular must be alarmed by the open demonstration of a nuclear weapons capacity by Pakistan, given that country's religious and political links to fellow Islamic nations in the Middle East.

55 See Medical Association for Prevention of War (WA Branch), Submission no. 21, vol. 1, p. 210.

56 H. Rashid, Submission no. 10, vol. 1, p. 58; The Australian Greens, Submission no.15, vol. 1, p. 159; Dr Samina Yasmeen, Submission no. 30, vol. 2, p. 139 and *Committee Hansard*, 22 July 1998, p. 175; Professor Amin Saikal, *Committee Hansard*, 21 July 1998, p. 146.

57 *Committee Hansard*, 21 July 1998, p. 147.

58 *Committee Hansard*, 20 July 1998, p. 63.

59 Submission no. 33, vol. 3, p. 12.

Pakistan's neighbour, Iran, is one of the four 'high risk' nuclear weapons states (along with Iraq, Libya and North Korea), considered to be well on the way to producing its own nuclear bomb. In addition, Iran is thought to be developing its own medium range missile which could be used to deliver such a weapon.⁶⁰

7.69 In looking to the broader Asian region, they pointed to the 'demonstrator effect' of the Indian and Pakistani nuclear tests which could send a message to developing countries, including Australia's regional neighbours, that one way of gaining domestic prestige and international status is by acquiring nuclear weapons. They saw the Asian economic crisis as a further complicating factor in the region. They noted that the possibility of regional nations suffering economic and social chaos turning to weapons of mass destruction to bolster their national and international standing as 'an issue that Australian security planners need to confront'.⁶¹

7.70 Any proliferation of nuclear weapons has the potential to encourage other states to develop their own nuclear weapon programs. By openly declaring their nuclear weapon capabilities, India and Pakistan spurned international norms, even in the knowledge that they would be subject to sanctions. Such a stand might give succour to other states seeking a nuclear option. It has certainly not lessened the risk of further nuclear proliferation.

7.71 It must be remembered that Indian and Pakistani nuclear weapon capabilities were already widely known. India had tested a nuclear device as early as 1974. And as neither is a member of the NPT, the tests did not transgress international law. However, the tests have put pressure on the global non-proliferation regime.

Non-Proliferation Regime

7.72 The nuclear tests have raised doubts about the viability of the nuclear non-proliferation regime. Dr Malik stated:

...the danger is that its defiance of global nonproliferation norms by India will prompt others to follow suit. The domino theory has it that nuclear proliferation in South Asia opens the possibility of similar development in other areas of regional tension, the Middle East (Syria, Libya, Iran and Iraq) and Northeast Asia (North Korea, Japan and Taiwan). In Southeast Asia, Vietnam is seeking nuclear and missile technology from India...The biggest worry is that a bankrupt Pakistan may be tempted to share its nuclear-weapons technology with other Islamic states, in exchange for financial aid or step up drug trafficking.⁶²

60 Submission no. 42, vol. 3, pp. 190–91.

61 Submission no. 42, vol. 3, p. 189. See also Dr Samina Yasmeen, Submission no. 30, vol. 2, p. 139.

62 Submission no. 24, vol. 2, pp. 17–18.

7.73 Dr Hanson supported the view that the recent nuclear tests could erode the achievements of the international community toward non-proliferation and weaken the global non-proliferation regime.⁶³ She asserted:

The last two years have seen a decline in expectations that significant arms control proposals can go any further. There is increasingly a sense that the international community cannot move towards new non-proliferation agreements and may not even be able to implement those agreements already achieved. Some of the advances made in recent years are in danger of being unravelled.⁶⁴

7.74 In summary, DFAT and Defence outlined both the regional and global concerns sparked by the recent nuclear tests. They maintained:

Weaponisation and deployment of nuclear arm[ed] missiles by India and Pakistan in the current environment of heightened bilateral tension, volatile domestic politics and rudimentary command and control systems, as well as the immediate geographic proximity of the two countries, create a serious risk of the use of nuclear weapons. The nuclear tests also run counter to international resolve to prevent the spread of nuclear weapons – a resolve which has seen in recent years the nuclear non-proliferation treaty extended indefinitely and the conclusion of the Comprehensive Test Ban Treaty.⁶⁵

7.75 Although the potential for nuclear proliferation to increase beyond South Asia, there is no evidence yet that this has happened noting, of course, that some states were seeking to fulfil nuclear ambitions before the tests took place. The NPT has weathered the threatened withdrawal of North Korea, Iraq's clandestine nuclear program and, so far, the Indian and Pakistani tests. The widespread recognition of the importance of the NPT to global security has enabled the NPT to withstand such trials. Nevertheless, the international community needs to remain vigilant to ensure that the non-proliferation regime is not eroded, particularly from within its own ranks.

Lack of Commitment to Nuclear Non Proliferation and Disarmament

7.76 Some regarded the South Asian nuclear tests as a sign pointing to a failed global nuclear non proliferation regime rather than a cause contributing to that failure. More specifically, they saw the tests as 'a symptom of the failure of the international community to fully commit itself to control the spread of nuclear weapons - and to work toward substantial reductions in the numbers of these weapons'. There is a view that the nuclear weapon states are not making significant headway in reducing their stores of nuclear weapons.⁶⁶ In support of this argument, Dr Hanson told the Committee:

63 Submission no. 20, vol. 1, p. 196.

64 Submission no. 20, vol. 1, p. 198.

65 *Committee Hansard*, 21 July 1998, p. 86.

66 Press Release: 'Nine Minutes to Midnight', *Bulletin of the Atomic Scientists*, 11 June 1998.

Essentially, there exists a widespread and growing view that the existing nuclear weapon states are not moving towards serious nuclear disarmament and appear unlikely to relinquish their own nuclear capacities. This is despite pledges from these states to reduce their own arsenals.⁶⁷

7.77 She suggested that this situation has only fuelled the nuclear aspirations of states such as India and Pakistan. She pointed out that China, France and Britain have indicated that if the two major nuclear powers move towards serious reduction, they will follow suit. She stressed that the initiative has to come from the US and Russia - they are 'the circuit breakers'.⁶⁸

7.78 In strong agreement, Dr Pitty pointed out that the fundamental weakness of the non-proliferation treaty is that the obligations imposed on the nuclear weapon states under Article VI to move in good faith towards nuclear disarmament have not been fulfilled.⁶⁹

7.79 DFAT conceded that during the Cold War, Article VI was 'definitely respected more in the breach than the observance, and that was very disappointing.' Nevertheless, Mr Griffin believes that the end of the Cold War has opened up new possibilities in terms of nuclear arms elimination. He referred to the START I and the START II processes.⁷⁰ This will be considered in more detail in Chapter 8.

Sub-critical tests

7.80 Some commentators believe that some of the nuclear weapon states are using sub-critical tests and computer modelling to further develop their nuclear weapon capabilities, and not just for nuclear safety reasons.

7.81 On the matter of sub-critical tests, DFAT told the Committee that the nuclear weapons states are undertaking or will conduct sub-critical experiments for the purpose of 'maintaining the reliability of their stockpile'. Mr Griffin explained that the nuclear weapon states made clear throughout negotiations on the CTBT that they would need to conduct non-explosive experiments in order to maintain the safety and reliability of their arsenals. He went on to explain:

It has been alleged by those who have problems with the CTBT—including India—that this is all a trick and nuclear weapons states will enhance their arsenals and will have more and more sophisticated nuclear weapons through non-explosive testing.

67 *Committee Hansard*, 20 July 1998, p. 61.

68 *ibid.*, p. 70.

69 *Committee Hansard*, 22 July 1998, p. 267.

70 *Committee Hansard*, 21 July 1998, p. 114.

Mr Griffin insisted that the nuclear weapon states were not flouting the CTBT and that there was no evidence to support the contention that they are or will use sub-critical tests to refine or further develop their nuclear stockpile.⁷¹

7.82 The issue of sub-critical tests - defined by Colonel Daniel Smith, USA (Retd.) as a 'nonself-sustaining nuclear chain reaction - remains clouded. Colonel Smith noted that the US Department of Energy's planned sub-critical tests were designed to ensure the 'safety and reliability of the US nuclear arsenal'. He made plain, however, that 'this means testing some plutonium to make sure it will explode should nuclear weapons ever be used'. In further explanation, he pointed out: 'While technically not violating the Comprehensive Test Ban Treaty ...these tests are contrary to the spirit of the Treaty'.⁷²

7.83 The Committee accepts that DFAT's assessment of sub-critical tests may well be correct but is nevertheless concerned that a number of individuals and organisations hold strong suspicions about the intentions behind sub-critical testing. The Committee believes that this uncertainty only further undermines confidence in the non-proliferation regime and highlights the need for greater transparency in the whole area of nuclear weapon activity.

71 *Committee Hansard*, 4 December 1998, pp. 382, 406.

72 Colonel Daniel M. Smith, 'Sowing - and Reaping - the Whirlwind', *Weekly Defense Monitor*, vol. 2, no. 22, 4 June 1998.