Pakistan Security Research Unit (PSRU) Brief Number 22
The Security of Nuclear Weapons in Pakistan

Professor Shaun Gregory Department of Peace Studies at the University of Bradford

Introduction

Pakistan is once again in crisis following the declaration of a state of emergency on the night of 3rd November 2007, as political unrest spreads, tensions within the armed forces and security services grow, and terrorist/extremist groups increase their violent opposition to the state. In this turbulent context the situation of Pakistan's nuclear weapons, numbered as many as 120 by some sources, is of the utmost concern given the incalculable consequences if nuclear weapons or nuclear weapons components came into the hands of extremists/terrorists or, just possibly, of renegade Pakistani military personnel motivated by antipathy to the West. This briefing paper assesses the measures Pakistan has in place to ensure the security of its nuclear weapons and the threat posed to that security by the deteriorating situation in Pakistan.

To ensure the physical security of its nuclear weapons Pakistan has relied heavily on copying United States' technologies, practices and procedures. In doing so it has put together a system for security assurance based around four types of measures: (a) technical safeguards; (b) personnel reliability; (c) physical and procedural arrangements; and (d) deception and secrecy. These arrangements give the Pakistan Army's Strategic Plans Division [SPD], the body which oversees Pakistan's nuclear weapons operations, a high degree of confidence in the security of their nuclear weapons2.

Technical Safeguards

Pakistan is unique in having nuclear weapons decision-making wholly in the hands of the military despite constitutional provision for the inclusion of civilians in nuclear command authority decision-making and despite periods of ostensible civilian rule. Pakistan's last two civilian leaders – Benazir Bhutto [Prime Minister 1988-90 and 1993-96] and Nawaz Sharif [Prime Minister 1990-93 and 1996-99] – are both on record as stating that they were excluded from the decision-making loop in relation to nuclear weapons, even during crises when operational nuclear issues arose3.

Pakistan imposes military executive authority over its nuclear forces through the use of an authenticating code system, passed down a dedicated chain of military

command, which is intended to assure that only duly authorised nuclear operations take place and that no unauthorised military personnel can order nuclear operations or use. Under this arrangement nuclear operational orders are accompanied by numerical codes that must be validated to confirm the authenticity of the order. These arrangements are supplemented by a tightly controlled ID system to assure the identity of those involved in the chain of command.

1 Shaun Gregory is Professor in International Security at the Department of Peace Studies, University of Bradford, Bradford, West Yorkshire, UK.

2 See for example: Lt Col Zafar Ali [SPD], Pakistan's Nuclear Assets and Threats of Terrorism: How Grave is the Danger?, Stimson Report, Henry L Stimson Center, July 2007.

3 See respectively: Benazir Bhutto, quoted in "No PM Knew About Country's N-capacity: Benazir," The News International, Pakistan (Internet edition), October 24, 1999 and Strobe Talbot, Engaging India: Diplomacy, Democracy and the Bomb, Brookings Institute, 2004, pp 154-169.

4 Cotta-Ramusino and Maurizio Martelline, Nuclear Safety, Nuclear Stability and Nuclear Strategy in Pakistan, Landau Network – Centro Volta, January 2002.

5 The interview was conducted in Rawalpindi in March 2005.

6 In 2004 an unremarked article appeared in the UK's Daily Telegraph claiming that the USA had provided Pakistan with a missile launch code system to prevent the unauthorised use of Pakistan;s nuclear missiles. See: David Blair, "Code Changes 'Secure' Pakistan Warheads", Daily Telegraph, 9 February 2004.

7 There has been much speculation that the USA may have transferred PAL technology to Pakistan, something Pakistan has always denied. Technology transfer does indeed seem unlikely given the risks of exposure in relation to the NPT and the risks of sensitive US technology finding its way into Chinese hands. See: "Outside Help in Protecting N-assets Denied", Dawn, February 8 2004.

8 Under US pressure General Pervez Musharraf has made a very public effort post 9/11 to impose discipline on the ISI, Pakistan's leading intelligence agency, including by replacing successive ISI

Directors and by imposing two to three year service rotation on ISI staff. This speaks of a lack of trust
of the ISI prior to 9/11 and makes the ISI an unlikely guardian of Pakistan's nuclear codes. Further no
ISI representative sits formally on the NCA.

9 Interview with General Kidwai, March 2005. A higher figure of 10,000 personnel has also been suggested. I am grateful to Bruno Tertrais for discussions on this point. As the "eyes and ears" of the

There is some ambiguity about whether or not Pakistan has also developed enabling code technology, similar to the US Permissive Action Link [PAL] system, which allows nuclear weapons to be electronically locked against unauthorised use using technology similar to cash machine "chip and pin". In 2002 the widely cited Landau report stated that Pakistan did not have PAL-type technology4. However in a more recent interview with the author, General Kidwai, head of the SPD, indicated that Pakistan had both "enabling and authenticating codes"5 to protect its nuclear weapons. This may mean the development of rudimentary PAL-type capability for nuclear warheads, or it may relate to a system for locking delivery systems6, as a means to further hedge against unauthorised 7

It is unclear where and how authenticating and possibly enabling codes are generated in Pakistan but in mirroring much of the USA's system throughout its nuclear command and control system Pakistan is likely to have given this role to a dedicated branch of the Army's Military Intelligence8. No information is in the public domain about how frequently the codes are changed and how exactly they are distributed through Pakistan's command chain. The operational demands of such a system are significant and, given Pakistan's fragile technical base, open up, particularly in periods of crisis, risks of system breakdown or the erosion of high level control.

Personnel Reliability

In relation to the personnel involved in nuclear weapons activities and operations Pakistan conducts a tight selection process for those involved in nuclear weapons duties (including the vetting of families), select staff almost exclusively from the Punjab who are thought to be less sympathetic to Islamist ideas, employs staff rotation to reduce the risks of conspiracy, and across those selected for nuclear related duties operates an equivalent of the US's Personnel Reliability Program [PRP] within which individuals are screened for personality problems, inappropriate external affiliations, drug-use, and sexual deviancy. In all some 8,000 personnel - drawn from the SPD's Security Division, and the Military Intelligence [MI], Intelligence Bureau [IB] and Inter-Service Intelligence [ISI] agencies - are involved in the security clearance and monitoring of those with nuclear weapons duties9. While it has been suggested that

Chief of the Army, the MI may also have a role in monitoring the ISI for the President. See: Owen

Bennett-Jones, Pakistan; Eye of the Storm, Vanguard Press, 2002, pp 238-241.

10 For details of Pakistan's National Command Authority and chain of command see: Rizwan Zeb,
"David Versus Goliath? Pakistan's Nuclear Doctrine: Motivations, Principles and Future", Defense and
Security Analysis, Vol 22 (4), December 2006, pp 394-397.

11 Shaun Gregory, The Hidden Cost of Deterrence: Nuclear Weapons Accidents, Brassey's Press, 1990,
pp 60-61.

12 There has been speculation that Pakistan operates a three-person rule, but that has not been stated
officially and may simply be rhetorical one-upmanship.

13 Joby Warrik, "Pakistan's Nuclear Security Questioned", Washington Post, 11 November 2007,
available at: http://www.washingtonpost.com/wp-dyn/content/article/2007/11/10/AR2007111001684.html?referrer=emailarticle

staff are re-vetted every two years10, what is not in the public domain is how well these practices and procedures are implemented and how many problem personnel these methods identify and remove annually. In the US, where historically comparable data for US staff with nuclear weapons duties has been available, decertification rates have remained more or less constant at around 4-5%11. It is not unreasonable to suggest therefore that similar figures are likely to obtain within Pakistan and that consequently 1 in 20-25 individuals with nuclear weapons duties in Pakistan may be unreliable in some way. This unreliability will take many forms and by no means all of these individuals will pose a security threat to the nuclear weapons, but some will.

As an additional hedge against this possibility of individual irrationality or mal-intent Pakistan operates a "two-person" rule to assure that each action involving nuclear weapons requires the decision and co-operation of at least two individuals12. While this is an important – and near universal – safeguard amongst nuclear weapons nations, it is no bar to the collusion of two or more individuals nor to the possibility that a determined individual could circumvent two-person arrangements.

Physical Security

Beyond these measures to guard against threats to nuclear weapons from unauthorised or irrational activity of military and security staff, the most widely acknowledged threat arises from the attempts by external parties, above all extremists and terrorists, to gain access to nuclear weapons or nuclear-weapons components. Pakistan has responded to these threats by operating concentric physical security measures around

nuclear weapons sites, one downside of which has been to make these sites the more visible to those with a motive to build knowledge of them. The three main elements of physical security are: (a) physical barriers and intrusion detectors, (b) the use of tiers of armed force personnel to provide layered defence of nuclear sites and (c) the physical separation of warhead core from weapon detonation components, and the storage of these nuclear weapons components in protected underground sites.

In relation the latter the technical demands of maintaining nuclear elements in a state of safety and readiness and Pakistan's claim that its weapons can be assembled very quickly strongly suggests that warhead core and detonation components may be separate but nonetheless collocated at a small number of sites – the Washington Post suggested Pakistan may have just six such sites13 though others suspect there are likely to be more. A further weakness is that physical security provisions erode significantly once nuclear weapons and/or nuclear weapons components are moved from their primary storage locations as, for example, is required for periodic testing

14 This important point is made in: Scott Sagan, "Perils of Nuclear Proliferation in South Asia", Asian
Survey, Vol 41(6), 2001, pp 1064-1086.

15 "Musharraf Says Nuclear Arsenal in Safe Hands, US Not So Sure", Dawn, 16 October 2000.

16 One notably exception to this is the missile and possible warhead component storage facility at
Sargodha to the west of Lahore, little more than 120 miles from the Indian border and a short thrust
across the plains between Amritsar and Lahore.

and refurbishment and for operational movements between storage and other facilities, including civil nuclear facilities.

Secrecy and Deception

Though extensive information is in the public domain about Pakistan's main nuclear facilities and nuclear weapons security arrangements, and presumably rather more information is available to US and other intelligence agencies, there are still significant elements of Pakistan's nuclear infrastructure which are kept a closely guarded secret. This may extend to the exact location of some of the storage facilities for nuclear core and detonation components, pre-configured nuclear weapons deployment sites, many aspects of Pakistan's command and control arrangements [such as the issue of pre-delegation of nuclear use down the command chain], and doubtless some aspects of the arrangements for nuclear weapons security. Moreover Pakistan has used deception – such as dummy missiles – to complicate the calculus of adversaries and is likely to have extended this practice to its nuclear weapons security.

The use of secrecy and deception are however not foolproof. While they may shield

part of the nuclear weapons infrastructure they do not shield it all and, as noted above, the technical demands of maintaining nuclear weapons at high levels of readiness mean that even nuclear weapons components held in secrecy will become visible or vulnerable during various stages of their recycling, while others – in better known sites – will remain vulnerable. A further weakness arises from the environmental arrangements for nuclear weapons which may disclose unintentionally information of use to adversaries. The widening of roads and roundabouts to allow the movement of Pakistan's large ground mobile nuclear missile launchers is a case in point allowing the informed observer to predict with some confidence the deployment routes of these missiles14. In all probability many such unintended self-betrayals have been made.

Notwithstanding all these weaknesses the foregoing measures collectively offer a very high degree of physical security assurance in normal circumstances and may have been behind both Secretary Rice's early confidence post 9/11 that Pakistan's nuclear weapons were "in safe hands" and General Musharraf's subsequent assurances that Pakistan's nuclear weapons were both safe from terrorist and extremist groups15, and proof against the possibility that they could be targeted, or perhaps even physically removed, by the US [or even India or Israel] to prevent them falling into the hands of terrorist/extremists. Six years on, and in the context of the present turbulence in Pakistan, do these assurances still hold good?

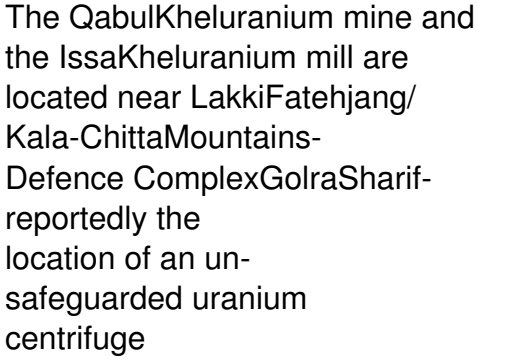
The Threats to Nuclear Weapons Security

An important framing point about Pakistan's nuclear infrastructure is that much of it has from the outset been deployed to the West of Pakistan to extend warning times of possible Indian attack against the infrastructure and to delay over-run from the ground16. The unanticipated consequence of this positioning has been to locate much

17 For an excellent overview of this relationship see: Zahid Hussain, Frontline Pakistan, IB Taurus,
2007.

of Pakistan's nuclear infrastructure either within or close to the more volatile tribal regions of Pakistan to the west and north-west of Islamabad [see figure 1].

Fig 1. Militant Extremist Encroachment on Pakistan's Nuclear Weapons Sites.



enrichment facilitySihala-identified as
a possible Uranium
Enrichment plantWahCantonmentOrdnance Complex –
includes possible
nuclear weapons
assembly siteChasma–
[CHASNUPP]
Nuclear power plantKhushab-heavy
water research
reactorRawalpindi -
Pakistan Institute of
Nuclear Science &
TechnologyKahutaKhan Research
Laboratories
Kundian-Fuel
Fabrication PlantThe QabulKheluranium mine and
the IssaKheluranium mill are
located near LakkiFatehjang/
Kala-ChittaMountains-
Defence ComplexGolraSharif-
reportedly the
location of an un-
safeguarded uranium
centrifuge
enrichment facilitySihala-identified as
a possible Uranium
Enrichment plantWahCantonmentOrdnance Complex –
includes possible
nuclear weapons
assembly siteChasma–
[CHASNUPP]
Nuclear power plantKhushab-heavy
water research
reactorRawalpindi -
Pakistan Institute of
Nuclear Science &
TechnologyKahutaKhan Research
Laboratories
Kundian-Fuel
Fabrication Plant

Notwithstanding the physical security measures outlined above to protect Pakistan's nuclear weapons and related components, the infrastructure remains vulnerable. This vulnerability takes two forms. One is the direct threat from extremist/terrorist groups who to date have not organised a sustained effort either to take possession of a nuclear weapon or weapons components or to create a radiological hazard by seeking to

engulf nuclear weapons components in a fire or an explosion [a point made more serious by prevailing westerly winds which could take radiological plumes across population centres], but may yet try to do so as their numbers increase and as their confidence grows. Until such an event occurs the elements of the defences will remain untested.

Equally serious is the vulnerability to threats from individuals and groups within the Pakistan military and intelligence services either working for their own ends or in co-operation with terrorist or extremist groups17. While the Pakistan military is usually portrayed as the least corrupt of Pakistan's institutions and its senior ranks are populated by ostensibly urbane and westernised individuals, the threat from within the military and intelligence services is real. Younger generations of officers, particularly those rising through the ranks in the post-Zia era have been markedly "Islamised" in comparison to those trained from an earlier time. The "beard count" within the armed

18 Hassan Abbas, Pakistan's Drift Into Extremism", M.E.Sharpe Press, 2005.

19 Kathy Gannon, I is For Infidel, Public Affairs Press, 2005, pp 127-149.

20 Biradari is the term for ties of male kin patri-lineage.

21 Discussions in Islamabad.

22 Musharraf has been subject to at least seven known assassination attempts. See for example:
"Pakistani Links Military to failed Plot to Kill Him", New York Times, 28 May 2004, p 12.

23 Ron Suskind, The One Percent Doctrine, Simon and Schuster, 2006, pp 155-157 and 204-206.

24 On this latter point, an important example is the meetings of two of Pakistan's top nuclear scientists
– Sultan Bashirrudin Mahmood and Chaudhry Abdul Majeed - with Al-Qaeda operatives and Osama
Bin Laden himself in 2000 and 2001. See: Corera, op cit, pp 161-164. A useful analysis of the motivations and objectives of nuclear terrorism can be found in Robin Frost, Nuclear Terrorism After
9/11, Adelphi Paper 378, IISS, December 2005, pp 55-62.

25 See: Adrian Levy and Catherine Scott-Clarke, Deception: the USA, Pakistan and the Global Nuclear
Conspiracy, Atlantic Books, September 2007. See also: Douglas Frantz and Catherine Collins, The
Nuclear Jihadist: The Man who sold the World's most Dangeous Weapons , forthcoming.

26 "Pakistan Nuclear Arsenal a US Worry", LA Times, 8 November, p 1.

forces in that sense has risen18. Reflecting this the military and intelligence services have for several decades had strong links with extremist/terrorist groups in particular the groups fighting in Kashmir such as Lashkar-e-Toiba, and the Taleban.

Today a significant proportion of Pakistan's military are members of the main Islamist political party Jamaat-I-Islami19, and many in the ranks are linked through ties of family and biradari20 to extremist groups21. Military and intelligence officers have been involved in assassination attempts against Musharraf22, and military officers have also been discovered to be colluding with al-Qaeda operatives. The most notable example of the latter perhaps being the case of Khaled Sheikh Mohammed, the suspected mastermind of the 9/11 attacks. Sheikh Mohammed narrowly escaped arrest in Karachi in September 2002, after being tipped off, and was finally arrested in Rawalpindi in February 2003. Sheikh Mohammed was captured in the "safe house" of a serving military officer with close family links to Jamaat-i-Islami having passed through the hands of a succession of military officers with nothing more in common that their JI membership23.

What these examples illustrate are the deeply rooted and widespread links between some in Pakistan's military and intelligence communities and extremist/terrorist groups. Allied to the proven intent of groups like al-Qaeda to gain access to nuclear weapons technology24, these relations are a cause for concern.

Indeed for many analysts Pakistan's role in nuclear weapons proliferation, which may be continuing even after the rolling up of the AQ Khan network25, and links between some in Pakistan's nuclear weapons industry and extremists/terrorists poses the greatest threat to nuclear weapons security, particularly during a period of political volatility such as Pakistan is presently experiencing. David Albright, President of the Institute for Science and International Security in Washington, argued recently that the leakage of nuclear technology from Pakistan was his fundamental concern. He added:

"If there is [further] instability Musharraf is going to have less ability to exercise tight control. Pakistan tends to leak vital nuclear information. It's the nature of the system".26

27 Zahid Hussain, op cit.

28 See for example the present rumours: M. Ilyas Khan, "Does Musharraf face a Coup?", BBC News
24, 5 November 2007, at: http://news.bbc.co.uk/1/hi/world/south_asia/7079445.stm

29 Anwar Iqbal, "US Contingency plans for Pakistani nukes", The Washington Times/UPI, 19 January
2005.

As discussed above Pakistan has taken steps through staff rotation, security clearance,

PRP programmes, intelligence oversight, and procedural and technical arrangements to secure its nuclear infrastructure but these cannot provide certainty against collusion. At any one moment there are likely to be a significant number of military, intelligence and civil nuclear sector personnel [the latter are less well vetted than those with direct operation roles over nuclear weapons] in place with access to nuclear weapons or weapons components who have antipathy to the west, sympathy for Islamist ideology, and/or links to extremist/terrorist groups. Further there is growing evidence of demoralisation and radicalisation within the Pakistan military and intelligence communities and of strengthening links with extremists and terrorists groups because of the presence of US and NATO forces in the region. Some in Pakistan's military and intelligence communities are rebelling against being required to turn their guns on their own kinsmen and countrymen at the behest of the United States27.

One further set of, albeit less likely, possibilities is pertinent: Pakistan has been subject to four successful military coups [1958, 1969, 1977 and 1999], in the second of which one military leadership replaced another. Each of these coups was enacted swiftly in a matter of hours with the coup plotters moving against the incumbent national leadership from the military's garrison of Rawalpindi less than half an hour's drive along the N5 from Islamabad. President Musharraf cannot rule out counter-coup plots against him28. Two dangers consequently arise: one is that in the context of a deteriorating situation in Pakistan a counter-coup could be staged by military officers antipathetic to the West; the other is that a smaller group of such anti-Western officers might stage an assault on nuclear weapons sites and take possession of nuclear weapons or weapons components with a view to exploiting that possession for political, financial or ideological advantage.

In response to these kinds of threats US Secretary Rice has stated that the US has "contingency plans" in place to deal with the possibility of Pakistani nuclear weapons falling into unauthorised hands29, but the specifics of what she meant has never been made clear. Some have speculated that the US may have plans either to destroy in situ or to take physical possession of Pakistan's nuclear weapons, but this seems highly improbable and has been strongly rejected as infeasible by Pakistan.

In relation to military strikes on Pakistan's nuclear weapons assets several issues need to be borne in mind. The first is that although US human intelligence inside the Pakistan armed forces is considerably better than, for example, inside the Iranian armed forces, it is far from perfect and, as noted above, aspects of Pakistan's nuclear weapons security planning elude even the US. Furthermore if Pakistan thought an attack was imminent it would be able to disperse and hide any assets it thought were imperilled.

The second obstacle is that attacks on nuclear weapons components with high explosive ordinance would run the risk of creating extensive radiological hazards

30 James Kyle and John Eidson, The Guts to Try: The Untold Story of the Iranian Hostage

Rescue,
Balantine Books, 2002.

31 Mark Bowden, Black Hawk Down: A Story of Modern War, Avalon Books, 2000.

which could threat the safety of many Pakistanis, particularly in cities such as Rawalpindi and Islamabad which are close to some nuclear weapons sites. The national, regional and international consequences for any US administration of this kind of action would be enormous and the chances of complete success minimal.

This has persuaded some that the US [or others such as India or Israel] may be planning insertion assaults to take physical possession of Pakistan's nuclear weapons and components and remove them to safety. As a hypothetical scenario this has the virtue of avoiding radiological hazard but it is impractical to the point of absurdity except in a situation in which the US has the agreement of the Pakistan army – or a pro-Western part of it – to assist the United States in the task in the context, for example, of a deteriorating situation or perhaps even civil war in Pakistan.

To suggest that the US – or anyone else – could seize all these weapons and components in the face of opposition from the Pakistan army is ludicrous. It is important to remind oneself of the robustness of the defence Pakistan's formidable army could mount to such attacks and to recall the previous failures of similar US assaults such as Operation Eagle Claw to rescue US Embassy hostages in Iran in 1979 which ended with US helicopters crashing into the desert because their air intakes were not fitted with sand filters30, or the failed attempts to arrest Somali warlords in Mogadishu in 1993 which became the subject of many books and the film "Black Hawk Down"31. By comparison with trying to secure Pakistan's entire nuclear weapons stockpile in a crisis these were very modest endeavours yet they ended in failure and ignominy.

This has persuaded wiser heads that Secretary Rice's remarks about "contingency plans" to secure Pakistan nuclear weapons were really only a rhetorical exercise aimed at reassuring the American public, and that if the situation really did disintegrate in Pakistan to the point where Pakistan military control of the weapons eroded there would be very little the US, or anyone else, could do about safeguarding Pakistan's nuclear weapons.

Conclusion

This briefing has detailed the arrangements Pakistan has in place for the security of its nuclear weapons. These arrangements, encompassing technical, personnel reliability, physical security, and secrecy and deception measures, provide a high degree of assurance against the weapons falling into the hands of terrorists or renegade military personnel. Nevertheless there are weaknesses in each of these areas that add up to a significant set of vulnerabilities in Pakistan's nuclear security arrangements. In the context of the present political turbulence in Pakistan in which Musharraf's control

may be weakening, in which the power of extremists and terrorists are growing, and in which anti-western sympathies within the Pakistan military and intelligence services are on the rise, some of Pakistan's nuclear weapons may be vulnerable to assault from terrorist groups or from some within the Pakistan military or intelligence services, perhaps working in collusion with terrorists. If the situation in Pakistan deteriorates further the security of Pakistan's nuclear weapons may be compromised.

bout the Pakistan Security Research Unit (PSRU)

The Pakistan Security Research Unit (PSRU) was established in the Department of Peace Studies at the University of Bradford, UK, in March 2007. It serves as an independent portal and neutral platform for interdisciplinary research on all aspects of Pakistani security, dealing with Pakistan's impact on regional and global security, internal security issues within Pakistan, and the interplay of the two. PSRU provides information about, and critical analysis of, Pakistani security with particular emphasis on extremism/terrorism, nuclear weapons issues, and the internal stability and cohesion of the state. PSRU is intended as a resource for anyone interested in the security of Pakistan and provides:
Briefing papers;Reports;Datasets;Consultancy;Academic, institutional and media links;

An open space for those working for positive change in Pakistan and for those currently without a voice.

PSRU welcomes collaboration from individuals, groups and organisations, which share our broad objectives. Please contact us at psru@bradford.ac.uk We welcome you to look at the website available through:
http://spaces.brad.ac.uk:8080/display/ssispsru/Home

Other PSRU Publications
The following papers are amongst those freely available through the Pakistan Security Research Unit (PSRU)
Brief number 12. Lashkar-e-Tayyeba
Brief number 13. Pakistan – The Threat From Within
Brief number 14. Is the Crescent Waxing Eastwards?
Brief number 15. Is Pakistan a Failed State?
Brief number 16. Kashmir and The Process Of Conflict Resolution.
Brief number 17. Awaiting a Breakthrough: Cyclical Issues of Governance in Pakistan
Brief number 18. Terrorists in the Tribal Areas: Endgame for Musharraf?
Brief number 19. Pashtuns in the Crossfire: Pashtun Politics in the Shadow of 'War against Terrorism'
Brief number 20. The India-Pakistan Peace Process: Overcoming the 'Trust Deficit'
Brief number 21. Pakistan's Political Process

All these papers are freely available from:
http://spaces.brad.ac.uk:8080/display/ssispsru/Home