Promoting Nuclear Stability in South Asia

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Agenda

• Acknowledgements
• About the Science, Technology, and Global Security Working Group at MIT
• Project on *Promoting nuclear stability in South Asia*
  – Objectives
  – Progress
  – Future
Acknowledgement

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The Science, Technology, and Global Security (STGS) Working Group

Researchers
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• Geoff Forden
• Subrata Ghoshroy
• Marvin Miller
• John Thomson

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• Danielle Mancini
Nuclear weapons a “dangerous place”

- Kashmir dispute unresolved since 1947
- Internal insurgencies in both India and Pakistan
- Border dispute between India and China
- Maoist insurgency in Nepal
- Tamil insurgency in Sri Lanka
- Transition to democracy in Pakistan, Bangladesh, and Myanmar (Burma)
- Resurgence of Taliban in Afghanistan
Build-up of conventional weapons aggravate the situation

• India has undertaken a major modernization program
  – aircraft, missiles, air defense, and submarines
  – missile defense
• Pakistan is also procuring sophisticated systems
  – Aircraft, missiles, submarines
• Indian security calculus not guided by Pakistan alone – the China factor.
In 2004, Indian defense budget was $15 billion and Pakistan’s $3.7 billion. India spends roughly 2.1 percent of the GDP and Pakistan about 4.5%.
Impact of introducing missile defense in south Asia

• Adds uncertainty and potentially undermines Pakistani nuclear deterrent
• Pakistan likely might develop a more sophisticated nuclear force in response
  – Mobile launchers, including submarine-launched missiles
• Deployment of cruise missiles by both sides
The China factor

- Chinese modernization influenced by US policy towards Taiwan and also US-Japan security collaboration
- Indian strategists believe that their missile defense system cannot counter Chinese missiles
- US missile defense program influences China’s strategy and linkages to space weaponization and fissile material production cut-off
Some Indian strategists argue need for missile defense

- India has a “no-first-use” policy
- Pakistan does not
- A “credible minimum deterrent” assumes survivable weapons and hence the need for missile defense
- Consequently, some argue that an ABM-like treaty is not appropriate
Little tradition in the region of independent analysis of defense issues

- Most scientists knowledgeable about the issues are part of the government
- Current discussions outside the government limited to a small group of security analysts – mostly non-scientists - who are close to the defense establishment
- Little transparency in decision-making process and relative absence of parliamentary oversight
- An embryonic military-industrial complex that is learning fast from their US counterparts
Motivations for the project

- Initiate a dialog among Indian and Pakistani scientists and policy analysts
  - technical and policy analysis of weapon systems to be jointly undertaken by participants

- Improve nuclear stability
  - Accident prevention, shared missile-launch warning

- Help bring about an informed debate on the desirability of certain weapon systems
  - Missile defense, cruise missiles, etc.
Topics Selected to date

• Assessing the impact of India’s deployment of a BMD system
• A framework for nuclear stability in southern Asia
  – A shared missile-launch surveillance system
• Space security
  – Opportunities for cooperation
  – Prevention of weaponization of Space
• Impact of the proposed US-India nuclear deal
• Energy security and ramifications of increased deployment of nuclear power
Lessons-learned from the US-USSR experience

– Role of the scientists in arms control and disarmament
– The ABM Treaty
– What is and what is not relevant to South Asia?
– Avoiding pitfalls
– Multi-lateral vs. bilateral (the China factor)
– Transparency and verification mechanisms
A stability framework for southern Asia

• Applicability of an ABM-like treaty
• Utility of the proposed shared missile launch warning system
• Possible enhancement of the recently concluded agreement between India and Pakistan on pre-notification of missile flight tests
Weaponization of Space

• Topic selected because of
  – the common ground between Pakistan and India on this issue
  – Linkage of space weapons to missile defense

• Will cover several issues:
  – The new US Space Policy and military space initiatives
  – Chinese, Indian, and Pakistani space programs and US concerns
  – The PAROS initiative
Progress to date

• Two successful visits to Pakistan and India in October 2005 and March 2006
  – Met with the Minister of Defense in India and the Commander of the Strategic Forces in Pakistan
  – Made a number of presentations in Islamabad and New Delhi
  – A two-day conference was held in each country:
    • A Pugawsh conference in Islamabad
    • A joint conference with IPCS New Delhi
Looking forward

• We are extremely happy to be meeting in Berlin for this conference and excited about the high level of government and non-governmental participation

• I am looking forward to substantive and productive discussions to help define specific issues of mutual interest among the participating delegations- at the Closing Plenary

• In the near term, the focus will be on publishing the conference proceedings with full length articles after peer review