Will War Bring Peace To Jammu and Kashmir?

Assessing The Strategic, Human And Economic Cost Vs. Benefits

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Introduction

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- Ø Escalation Potential At the Brink
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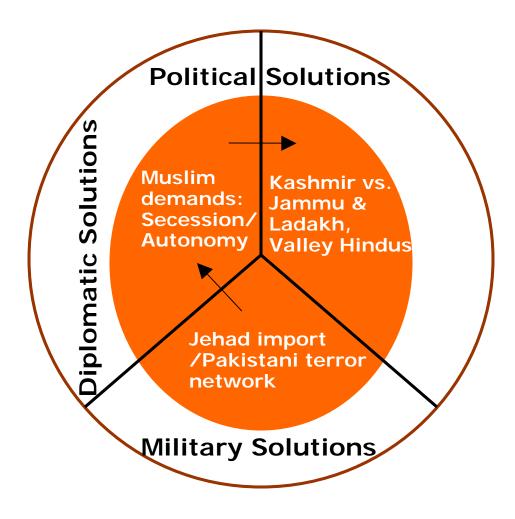


The Kashmir Issue

- Ø Jammu and Kashmir unresolved since 1947
- Ø Pakistani intervention in 1990 has turned it into a "Nuclear Flashpoint"
- Ø Any Indian attempts to defuse the situation elections, ceasefire, talks scuttled by Pakistani military and ISI
- Ø Lone killing, Continued killings of pro-India politicians
- Ø Post-September 11 events failed to end Pakistan's sponsorship of Kashmir terror



Issues Vs. Solutions





Political Options

- 1. LOC -> International Border
- 2. Greater Autonomy to J&K
- 3. Trifurcation/Quadrification
- 4. Abrogation of Article 370, full integration of state with India
- 5. Independence/Ceding to Pakistan
- Ø Intact Pakistan military establishment will never sign on to Option 1 through 4
- Ø Option 5 will open the floodgates of secession movements and will provide Jehadis a new base for further invasion of India



Diplomatic Options

- Ø Bilateral relations embassy closings etc.
- Ø Trade/treaties:
 - Indus Water Treaty Pakistan may regard abrogation as act of war
- Ø Third party intervention US "facilitation"
- Ø US unwilling to press Pakistan
- Ø All options so far used have failed
- Ø US, Britain have accepted that terrorism is central issue



Military Options – Pinpoint Strikes

- Ø Aim Pinpoint strikes to destroy terror camps in POK
- Ø At best will displace camps temporarily
- Ø Pakistani terrorist infrastructure intact
- Ø Infiltration will continue
- Ø Few benefits, costs may be high some danger of nuclear escalation



Military Options – Limited POK Incursion

- Ø Aim Occupation of strategic areas in POK
- Ø Could cut off most infiltration routes
- Ø Provide India with buffer zone
- Ø Will leave Pakistani military strength intact for future adventurism
- Ø Other routes may be found through Nepal, Bangladesh
- Ø Is achievable within few days before western powers intervene (?)
- Ø Higher danger of nuclear escalation



Military Options – Full Scale War

- Ø Aims
 - Significant Degradation of Pakistani Military
 - Possible fragmentation of Pakistan
 - De-nuclearization
 - Taking back of entire POK
- Ø Comprehensive solution to terrorism in South Asia
- Ø Could eradicate Al Qaida in concert with US action in Afghanistan/Western Pakistan
- Ø Indian air superiority can be gained quickly, but ground action will lag
- Ø Most difficult to achieve may take too long to pre-empt international intervention
- Ø Nuclear escalation is extremely likely
- Ø While benefits are high, costs without US support are very high also



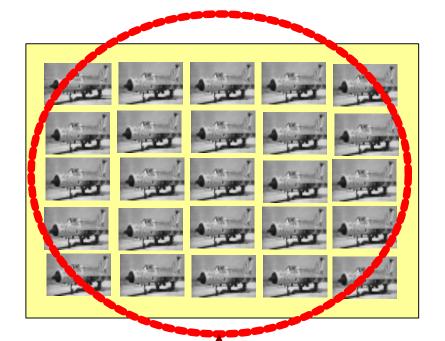
Escalation – At the Brink

- Ø Limited incursion into POK appears to be the most effective costbenefit option
- Ø Nuclear escalation is possible with any option, due to Pakistani doctrine
 - What is nuclear escalation?
 - Why is India hesitant to use any military option?
- Ø Nuclear delivery options
 - Airplanes
 - Missiles
- Ø Pak air force is weak, but missile armoury is not
- Ø Even without a nuclear exchange, Pakistani missile armoury can create significant losses to India within hours
- Ø Pre-emptive Pakistani strike strong possibility in next few years, esp. if J&K stays in India



Strategic Costs

- Missile attacks on air bases
- Ø Air superiority can be neutralized in hours



900 X 900 feet, ~100 Parked Fighter jets

> Source: Airbase Vulnerability to Cruise-Missile and Ballistic Missile Attacks, Eds. Stillion & Orletsky, Rand Corporation, 1999

Destruction range of conventionally-armed (500 kg payload) Chinese M-class/Pak Hatf missile

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Human Costs

- Ø Hundreds of thousands could die in single nuclear attack on population center
- Ø Hundreds could die in conventional missile attack, but effects on morale would be devastating considering India has not built shelters for civilian population
- Ø After-effects of multiple nuclear attacks on cities would be catastrophic



Economic Costs

- Successful nuclear missile attacks on Bombay, Bangalore, Delhi would set India's economy back by decades
- Ø Accurate conventional missile strikes on Bombay Stock Exchange, other economic assets would be disastrous
- Ø Economic and health effects could reverberate around the world



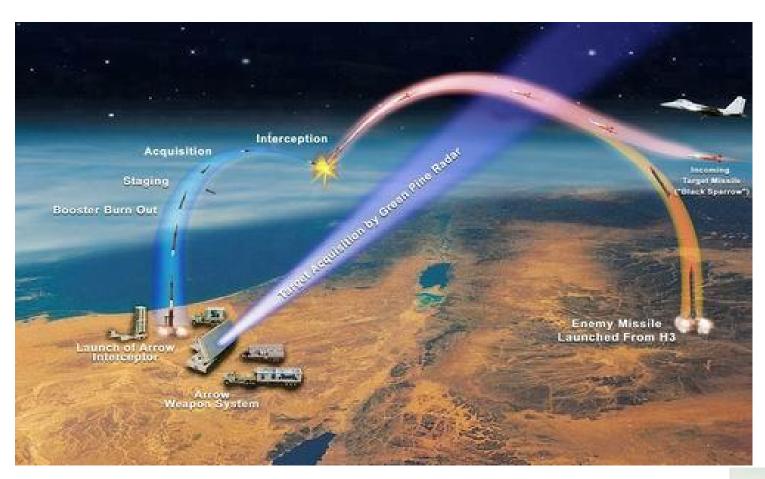
Lack of Informed Debate

- Ø After Persian Gulf War and attacks by Iraqi Scuds, Israel spent next decade building an effective missile defense system
- Ø The SDI-Star Wars debate in the US was sparked by a significant threat of Soviet ICBMs
- Ø Very little informed debate in India despite the clear and present danger from Pakistani missiles



- Ø No country has national missile defense
- Ø Theater missile defense in place around Moscow and in Israel
- Ø US forces use PAC-2/3 batteries
- Ø Russian S-300/Antey 2500 anti-ballistic missile system deployed in India
- Ø Moderate effectiveness ~60% per interceptor vs. 30-50% for PAC-2/3
- Ø Israeli Arrow ABM system much more effective ~90% (?) per interceptor (not ready?)





(Source: Israeli Aircraft Industries website)



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- Simplistic view of Theater Anti-Missile Defense (TAMD) architecture
- Ø Percentage protection of each asset is function of interceptor effectiveness and number of interceptors assigned per expected enemy missile: $LR = (1 P_k)^n$

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LR = Leakage Rate, P_k = Probability of kill by interceptor,

n = number of interceptors used per missile
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Ø For example, might want to achieve 99% protection of population centers, 94% protection of air bases



- Ø Assume Pakistan has ~100 missiles
- Ø For protecting Delhi, Bombay and Bangalore with 99% certainty, need 300 Russian S-300 interceptors, or 70 Israeli Arrow interceptors.
- Ø For protecting 10 air bases with 94% certainty, need 300 Russian interceptors, or 100 Israeli Arrow interceptors



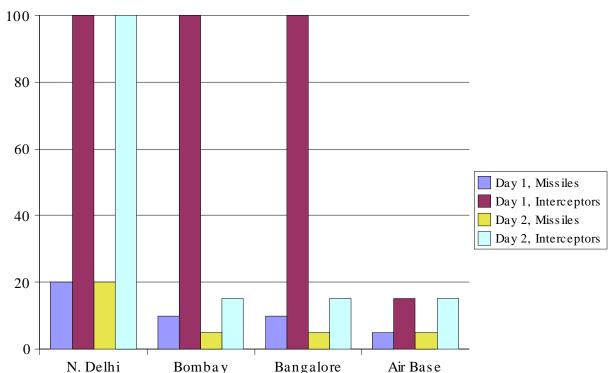
Asset	Leakage	Interceptors/missile
N. Delhi	0.0	1 5
Bombay	0.0	1 5
Bangalore	0.0	1 5
Air Base	0.0	6 3



Risk Mitigation – Options in

Missile Defense

Sample Theater Missile Defense Architecture



Source: Theater Ballistic Missile Defense, Eds. Ben-Zion Naveh & Azriel Lorber, American Instt. Of Aeronautics & Astronautics, 2001 **Assumptions:**

First day:

- 20 missiles fired at N.Delhi
- 10 missiles each at Bombay, Bangalore
- 5 missiles each at ten air bases

Second day:

- 20 missiles fired at N.
 Delhi
- 5 each at Bombay, Bangalore
- 5 each at ten air bases

Leakage Rate allowed:

0.01 for population centers0.06 for air bases

<u>Interceptors per enemy</u> missile:

5 for population centers 3 for air bases



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Risk Mitigation: Missile Defense Cost Comparison

- Ø For such a sample TAMD deployment the cost is ~\$600 million for Russian S-300 or ~\$200 million for Israeli Arrow-2 system
- Ø Compare to hundreds of millions of dollars spent on deployment and counter-insurgency operations per month by India
- Ø Goal is not to arrive at exact figures, but to generate a debate on what it will cost India to protect itself and to break Pakistan's terrorist stranglehold of J&K

Sources:

Ariel Center for Policy Research: The Arrow System – Concept and Data www.acpr.org.il//publications/policy-papers/pp032-xs.html

Center for Non-Proliferation Studies: The Russian S-300PMU-1 TMD System http://cns.miis.edu/research/cyprus/s300tdms.htm

Institute for Peace and Conflict Studies http://www.ipcs.org/archives/2002/02feb2002/02jan-feb-pak.html



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Conclusions

- Ø Kashmir problem is a set of complex issues, but root is in the terrorism/fundamentalism export from Pakistan
- Ø Political solutions are more suited to local Muslim demands vs. aspirations of Jammu, Ladakh, and Kashmiri Hindus
- Ø "Facilitation" will not solve the issues
- Ø Terrorism solution is unlikely without military action



Conclusions

- Ø Pakistani ballistic missiles expose India to grave nuclear and conventional threat, neutralize India's air superiority
- Ø Lack of informed debate in India on immediate need for theater anti-missile defense is troubling
- Ø Cost may be in hundreds of millions compare to continuing costs of J&K counter-insurgency and Pak confrontation
- Ø TAMD may be answer to Pakistani nuclear blackmail and a crucial component of military action to end Kashmir terrorism



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