

# Limited Nuclear Options & The Entente Cordial:

Implications of Technology Transfer  
for Pakistan's Flexible Nuclear  
Strategy

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# Summary

- Pakistan attempts, with China's help to maintain a credible nuclear deterrent
- First use nuclear doctrine & low yield, sub-kiloton battlefield weapons
- Where is Pakistan turning to address its needs and what are the impacts, if any to the strategic balance?
- The weapons, fissile material, and Command, Control and Reconnaissance dimensions;

# Recap 1998-Present

- Overt Nuclearisation of the strategic relationship following tests in 1998;
- Ensuing period of conflict and confrontation between 1998-2002
- Kargil Conflict; Operation Parakram;
- The arrival of TNW's 2011 Nasr & Abdali 60km
- Addressing India's post Kargil doctrine (i.e. Cold Start);

# India's Cold Start & IBGs

- 8 divisions, rapid deployment, close air support;
- Many penetration points along the 1800 mile border
- Pakistani reconnaissance systems cannot monitor

# New Systems, Old Problems

- Pakistan reconnaissance and accurate battlefield intelligence;
- India's IBGs will overwhelm Pakistan's C4ISR capabilities,
- C4ISR vulnerabilities: Reconnaissance and C2 systems.
- Introduction of UAVs;
- Low recon reliability limits the deterrence value of the Nasr (60 km) and Abdali (180 km);

**“Nuclear tripwires are not uniform, these appear to be much shorter and tighter in the Punjabi Heartland, relatively more stretched in Sindh and loose in Pakistan Occupied Kashmir (POK)” Ret. Brig. Arun Sahgal**



**SHAHPAR UAV:  
SUBSTANTIALLY ENHANCES REAL TIME TARGET ACQUISITION CAPABILITIES  
- CHIEF OF ARMY STAFF**



**“NASR” LAUNCHED FROM A100 E  
MULTIPLE LAUNCH ROCKET SYSTEM**

# Question of Survivability

- Nasr, Abdali missiles, MLRS & pre-surveyed launch positions along the Line of Control
- Attractive targets for Indian planners, given limited number of TNWs in the arsenal;
- Weapons are dual use & decoy MLRS also complicate targeting;
- Alternative/Augmenting Solution: Target PakPal's with precision electronic sabotage

- Electronic warfare attacks on dual use C4ISR
  - UAVS
  - Computers and Communication networks
  - PALs
- Passive & active attack profiles
- Risk factors high; Pakistan detects attack, attack fails, or interdiction reduces impact, what then?

# Conclusion

- C4ISR: dual use increases nuclear risks
- As Pakistan perennially lags behind strategically superior India, China will make sure it is still a significant threat;
- Continued build up of low yield, short range nuclear capabilities
- The next tech transfers may be continuation of recent reconnaissance based systems;